II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID # OHD 004 465 084

A. Physical Location and Description

The Scio Pottery Site is located at 38500 Crimm Road, in Scio, Harrison County, Ohio, 43988. The geographic coordinates of the site are latitude 40°23'55" north and longitude 81°05'47" west. The Pottery occupies approximately 50 acres and is bordered on the northeast by railroad tracks, Conotton Creek, and the Conotton Walking Trail. Crimm Road borders the site on the south and west, and residences border the site to the east. A series of former lagoons are located on the northwest portion of the site that were used as settling ponds when the facility was in operation. The lagoon discharges into an intermittent, unnamed tributary to Conotton Creek. Most area residents are located within ½ mile northeast and southeast of the site. This Action Memorandum addresses lead contamination issues in the former lagoon (approximately 5 acre) area.

B. Site Background

The facility was built in 1911. Scio Pottery, a family-owned business, began manufacturing semi-vitreous white ware and dinnerware at the site between 1933 and 1985. Operations ceased at the site in February 1985. During operations, the site generated wastewater from its lead-based glazing and slip house operation. The waste was discharged into a series of on-site lagoons. The waste water and clay slurry were routinely discharged to an unlined 2-acre surface impoundment behind the main plant. In addition, large volumes of broken glazed pottery were dumped behind the plant to form roadways and berms for the lagoons.

The Ohio Environmental Protection Agency (Ohio EPA) collected sludge samples from the lagoons in May, 1985, and analytical results indicated toxicity for lead. Analytical results for water samples collected by Scio Pottery from on-site wells in April, 1986, contained lead at (310 μ g/L) well above the federal drinking water standards of 15 μ g/L.

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ASSESSMENT OF SCIO POTTERY SCIO, OHIO

OHD 004 465 084

The Scio Pottery is presently a closed, family-owned business. When active, the pottery manufactured a variety of dinnerware. Manufacturing ceased in the late 1980's because of foreign competition.

The business opened in 1911. Throughout most of the manufacturing history, lead-based glazes were used. Waste waters and clay slurry were routinely discharged to an unlined 2-acre surface impoundment behind the main plant building. In addition, large volumes of broken glazed pottery were dumped behind the plant, to form roadways and berms for the lagoon. The resulting lead contamination in the clay sludge and surrounding soil ranges from 100 to 100,000 mg/kg. The underlying ground water also shows lead contamination.

In 1981, OEPA discovered the surface impoundment. Two years later, OEPA directed Scio to sample the clay sludge in order to determine if it is hazardous. Scio refused, and OEPA conducted the sampling. When the surface impoundment was verified as an illegal unit, Scio announced its intent to close it. In 1985, OEPA directed Scio to submit a plan for closure, confirmatory sampling, and ground water monitoring. Scio appears to have submitted a plan with little detail.

By 1986, U.S. EPA issued a Complaint and Compliance Order to Scio, calling for detailed plans for closure of the surface impoundment, ground water monitoring, and financial assurance for closure. Scio responded by stating that it had received a research grant from the Ohio Coal Commission, to build a rotating bed coal-fired boiler. The purpose of which was to use local coal for the in-house generation of electricity, which was supposed to reduce operating costs and allow Scio Pottery to resume production.

For closure of the surface impoundment, Scio revised its closure plan to propose feeding the clay sludge into the boiler it hoped to construct. The theory was that the high temperatures would vitrify the sludge into clinker, thereby immobilizing the lead. The clinker would be redeposited into the surface impoundment, which would close as a landfill. Region 5 disapproved, noting that the process was actually incineration. In 1988, Scio responded by arranging a conference call between itself, a local Congressman, OEPA, and Region 5. As a compromise, Y.J. Kim stated that the plan could be workable if the volume of sludge fed into the fuel stream would be low enough so that the lead concentration in the entire mass fell below the EP Toxicity threshold. Scio representatives said that they would consider the plan.

By 1989, OEPA received authorization for the base RCRA program, and closure issues transferred to the State. Scio revised its closure plan once and installed four monitoring wells around the surface impoundment.

OEPA continued issuing NOVs to Scio, citing closure and ground water monitoring violations. Region 5 ECAB became involved, and issued a CAFO in 1994. Also in 1994, DOJ became involved, and brought Scio to trial in District Court. The Federal judge ordered Scio to provide adequate plans for closure and ground water monitoring, and pay a penalty. Records indicate that Scio paid one installment, but has plead bankruptcy.

Scio received NOVs for its ground water monitoring network, but made some revisions to its closure plan. In 1997, Scio proposed to OEPA a new venture, using the clay sludge to manufacture bricks, if a vendor's equipment could be purchased. The vendor contacted OEPA, stating that it would take charge of the closure, if OEPA would state specifically what closure plan deficiencies must be addressed.

In 1998, the vendor submitted a few closure details to OEPA. By administrative error, the information submitted was given public notice as an amended closure plan, in 1999. OEPA technical staff caught the mistake and retracted the public notice. Scio and the vendor were angered, thinking that the public notice committed OEPA to approval of the plan.

To date, the vendor has pulled out of the deal, and Scio's representatives remain angry. Scio has taken no further action on closure or ground water monitoring, still pleading bankruptcy. OEPA notes that the family which owns Scio has other business interests which have been profitable, and continues to issue NOVs and warning letters. DOJ has also issued warnings and inquiries as to why its Order has not been followed.

Scio has been unresponsive. The situation of the surface impoundment and surrounding pottery fragments has not changed. OEPA informed me that the monitoring wells are, by now, so badly damaged as to be useless.

Our 1987 PA/VSI report lists the surface impoundment and pottery fragment berm as the most significant SWMUs. Other identified SWMUs include trash piles and indoor tanks (waste water, sludge, off-spec. glaze) situated on concrete floors. OEPA concurs that the two land-based SWMUs are the major issue. One AOC is a gasoline UST, which has not been evaluated.

SUMMARY:

The high levels of lead contamination found in its land-based units, and its location (bounded on one side by a small town residential area) appear to make Scio Pottery a high-priority NCAPS facility. However, the prolonged and difficult interaction with regulatory agencies has apparently left the company angry and mistrustful of these agencies. Although significant environmental problems remain, this does not appear to be a candidate for a voluntary agreement.

Don Heller April 3, 2002 September 18, 1987



Ms. Pat Vogtman
Regional Project Officer
U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Reference: EPA Contract No. 68-01-7374; Work Assignment

No. R25-01-09; Scio Pottery Company, Scio,

Ohio; Visual Site Inspection Report, Revision 1

Dear Ms. Vogtman:

Enclosed is the revised Visual Site Inspection (VSI) Report for the Scio Pottery Company in Scio, Ohio. This report presents the results of the VSI portions of the RCRA Facility Assessment (RFA) for this facility. The purpose of the VSI was to provide the U.S. EPA permit writer a first-hand view of the facility prior to review of the facility's closure plan. The VSI Trip Report, VSI Photo Log and Field Log are included as attachments to this report.

Because the scope of the file review was limited to materials provided by EPA, the reasonableness and accuracy of our unit descriptions and conclusions are subject to the limitations of the materials contained in this report. In addition, limited historical information was available from facility representatives on prior waste management practices. Due to the paucity of historical information available, and the age of the site, it is possible that additional SWMUs exist at the facility.

Ms. Pat Vogtman September 18, 1987 Page 2

The VSI resulted in the identification of seven Solid Waste Management Units -- Waste Drum Storage Area, Scrap Storage Area, Oil Storage Area, Renovation Debris Waste Storage Area, Broken Pottery Fill Area, the Settling Pond, and Used Kerosene Tank. Because the facility recycles extensively in its process line, few SWMUs are required to handle process waste at the facility. A hydrogeologic investigation and groundwater monitoring program has been initiated for the Settling Pond. In addition, two other areas of concern have been identified which are described in this report -- the Underground Storage Tank and the Aboveground Storage Tank.

Please feel free to call the undersigned or Vanessa Harris, the Work Assignment Manager, if you have any questions.

Sincerely,

Lee Deets

Technical Director

Don Beasley

Program Director

Enclosure

cc: L. Pierard, EPA Region V

J. Grieve

V. Harris

P. Singh

B. Freeman

Management Consultants DON

October 19, 1987

Ms. Pat Vogtman
Regional Project Officer
U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

AT KEARNEY

Reference:

EPA Contract No. 68-01-7374; Work Assignment No. R25-01-09; Scio Pottery Company, Scio, Ohio; Visual Site Inspection Report, Addendum 1

Dear Ms. Vogtman:

Enclosed are two copies of Addendum 1 to the Scio Pottery Company Visual Site Inspection Report which was requested by Ms. Lisa Pierard. The addendum contains two additional SWMU descriptions, their associated suggestions for further actions, and an updated SWMU map and index of photographs.

We tried on several occasions to contact the facility representative for additional information regarding these SWMUs, but was unable to reach him. Thus, the information in these SWMU descriptions contains only that which was obtained during the Visual Site Inspection.

If you have any questions, please call the undersigned or Vanessa Harris, the Work Assignment Manager (who can be reached at 312/648-0111).

Sincerely,

Lee A. Deets

Technical Director

Don R Scarley
Don Beasley

Program Director

Enclosure

cc: L. Pierard, EPA Region V

J. Grieve

V. Harris

A. Williams

VISUAL SITE INSPECTION REPORT

Addendum 1

SCIO POTTERY COMPANY SCIO, OHIO

EPA I.D. NO. OHD004465084

Prepared for:

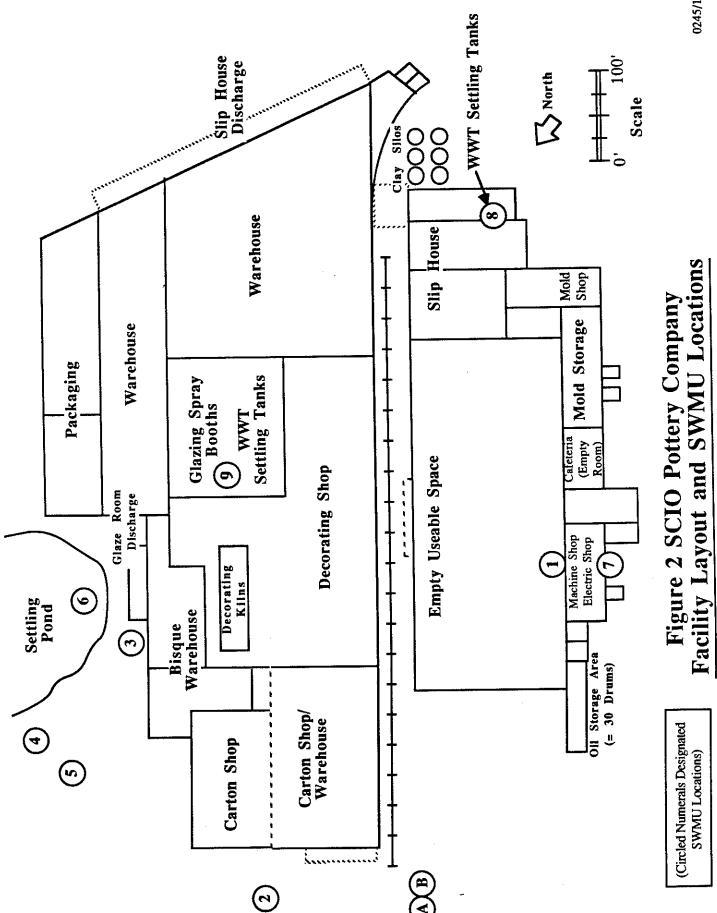
U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Prepared by:

A. T. Kearney, Inc. 222 South Riverside Plaza Chicago, Illinois 60606

Contract No. 68-01-7374 Work Assignment No. R25-01-09

October 19, 1987



cascading bed boiler. The rotary cascading boiler is similar to a fluidized bed boiler, except that the coal combustor uses mechanical action instead of air to mix and compress the coal (Reference 5-7).

The pottery manufacturing process (Figure 3) involved: a) forming plaster of paris molds; b) placing the slip (liquid clay) in the molds to form the ware; c) finishing/smoothing each piece; d) drying on a conveyor belt; e) firing in a kiln; f) automatic machine glazing; and g) re-firing in a gloss kiln. Liquid clay used in the slip house, as well as glaze used in the spray booth, were recycled through settling tanks. Dilute wastewater from both sets of settling tanks was discharged to the waste settling pond (SWMU No. 1). Prior to 1985, a small product-line was glazed using the hand-dipped process.

Glazes are thin layers of glass fused on to the surface of the pottery-ware. Glazes containing lead aluminosilicate additives were commonly used in pottery-making, because lead imparts brilliance, hardness and smoothness. Lead glazes are also less susceptible to minor variations in firing temperature (Reference 8).

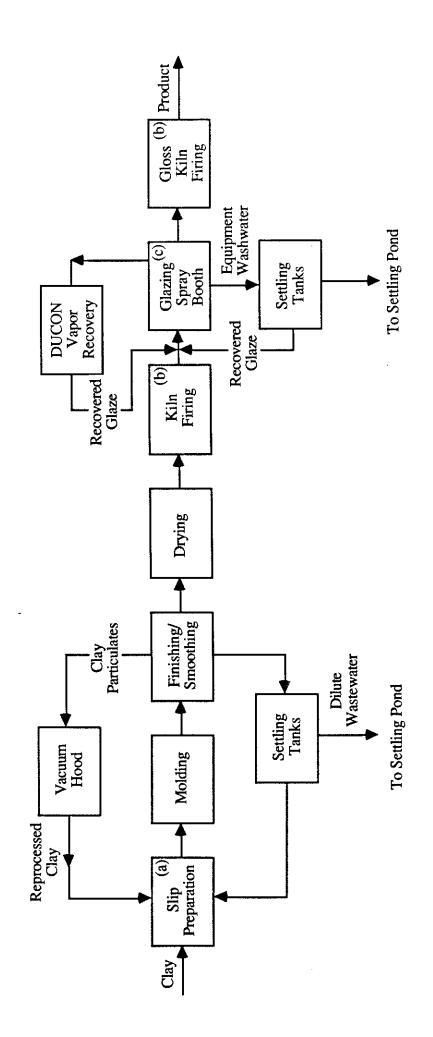
grant from the Ohio Coal Development Office for a study to determine the feasibility of a cogeneration system using a rotary cascading bed boiler. The rotary cascading boiler is similar to a fluidized bed boiler, except that the coal combustor uses mechanical action instead of air to mix and compress the coal (Reference 5-7).

The pottery manufacturing process (Figure 3) involved: a) forming plaster of paris molds; b) placing the slip (liquid clay) in the molds to form the ware; c) finishing/smoothing each piece; d) drying on a conveyor belt; e) firing in a kiln; f) automatic machine glazing; and g) re-firing in a gloss kiln. Liquid clay used in the slip house, as well as glaze used in the spray booth, were recycled through settling tanks. Dilute wastewater from both sets of settling tanks was discharged to the waste settling pond (SWMU No. 1). Prior to 1985, a small product-line was glazed using the hand-dipped process.

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Figure 3 Process A low Diagram Scio Pottery Company



a = Liquid Clay

b = Previous operations used a natural-gas fired kiln.Future operations will use an electric kiln.

c = Glaze used on process line contained lead until 10-15 years ago.

B. Waste Streams

While in operation, the facility generated wastewater from their slip preparation and glazing operations (98% of the wastewater was generated during slip production). The wastewater was discharged into a Settling Pond (SWMU No. 1) behind the manufacturing plant that eventually flowed into Conotton Creek (Figure 4). Wastewater has been discharged into the Settling Pond since the 1950s (Reference 4, 7). The amount of industrial wastes produced annually and flow rate are unknown. Prior to approximately 1974, lead was used in the glazing process line (Reference 7). Wastewater containing lead was discharged into the Settling Pond (SWMU No. 1). As a result, lead contamination has been found in both the Settling Pond and Conotton Creek. Some sludge and dredging samples from the settling pond have exhibited EP toxic characteristics due to lead in excess of the toxicity limit of 5.0 mg/1 (Reference 3).

The wastewater contained suspended solids from clay powders including: bulk kaoline, carver (coarse kaoline), feldspar, talc, and flint. The NPDES limit for discharge of suspended solids into Conotton Creek is 8 pounds per 24 hours (Reference 7).

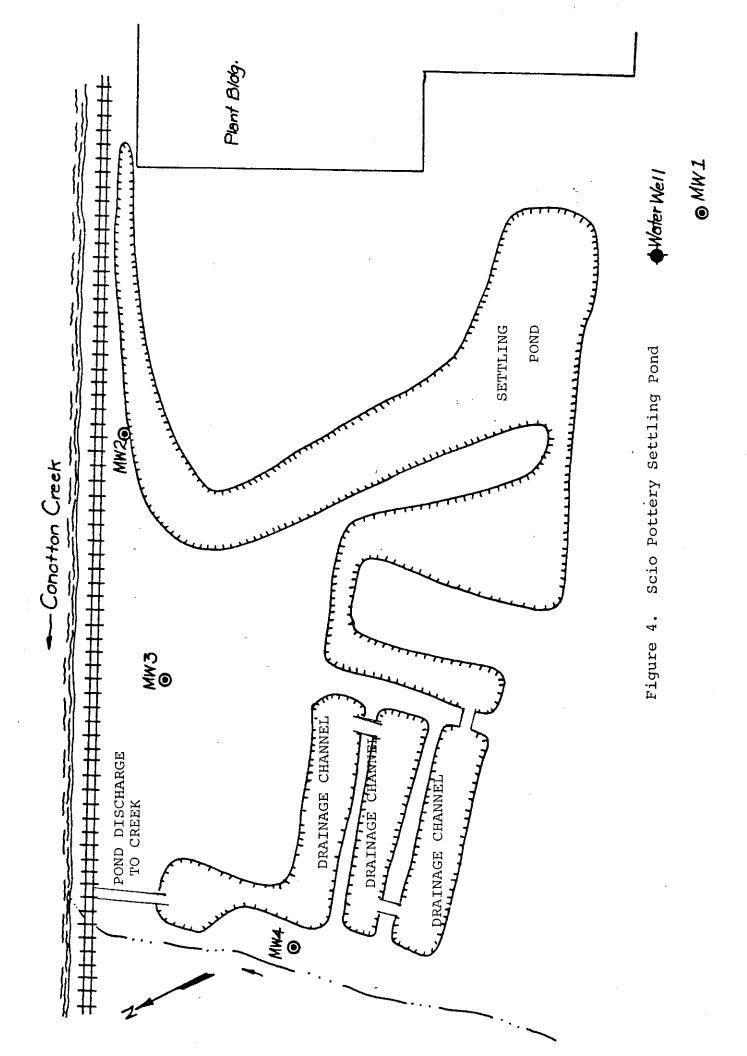




Figure 1 Aerial View of Scio Pottery



Photo 1: Open Area, currently under renovation.
Debris consists primarily of bricks.



Photo 2: Plant Production Area, currently under renovation.



Photo 3: Plant Production Area, currently under renovation.
Drain pipes originally led to underground slip
recycling tanks.



Photo 4: Plant Production Area, mold shop cases.

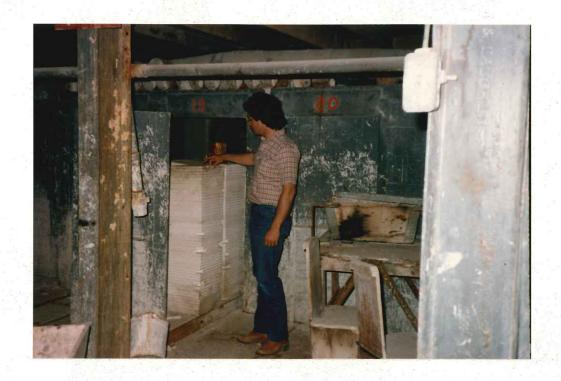


Photo 5: Plant Production Area, mold shop cases.



Photo 6: Plant Production Area



Photo 7: Plant Production Area



Photo 8: Plant Production Area



Photo 9: Slip Production Area



Photo 10: Opening to Slip Recovery Tanks



Photo 11: Dry Clay Collection Area (Clay Silo Room)



Photo 12: Production Area: Lawning (Screening) Area



Photo 13: Production Area: Slip Tanks which usually contain recycled liquid clay (4 tanks total)



Photo 14: Grate above recycling holding tank. The tanks are located in a concrete and have a total capacity of approximately 1,000 gallons. The tanks are cleaned regularly by taking the lid off and lifting out the sludge.



Photo 15: SWMU No. 1 - Drums containing waste paint and motor oil. Note oil spill in center of photograph.



Photo 16: SWMU No. 2 - Scrap Storage Area from current renovation. Direction of photo is east.



Photo 17: SWMU No. 3 - Oil Storage Area, last used during World War II. Direction of photo is west.



Photo 18: Other Area of Concern A - Underground 1,000 gallon storage tank: The unit is in the area of the gasoline pump.

Other Area of Concern B - Aboveground 500 gallon storage tank. Unit contains kerosene.

Direction of photo is south.



Photo 19: SWMU No. 4 - The lower portion of photograph is a Scrap Storage Area during renovation. The unit contains wood rubble and rusted pipe.

SWMU No. 5 - The upper portion of the photograph contains broken pottery fill. Broken pottery fill is found throughout the rear of the facility.

Direction of photograph is west.





Photo 21: SWMU No. 6 - Settling Pond; direction of photo is esat. Note discharge pipe in photo center. Also, note embankment is covered with broken pottery.



Photo 22: Monitoring Well No. 1 in center of photograph. Direction of photograph is northeast.



Photo 23: SWMU No. 6 - Settling Pond Peninsula; direction of photo is south.



Photo 24: SWMU No. 6 - Settling Pond; direction of photo is south. Note embankment and road covered with broken pottery.



Photo 25: SWMU No. 6 - Settling Pond Drainage Channel; direction of photo is north.



Photo 26: SWMU No. 6 - Settling Pond Drainage Channel; direction of photo is east. Note rusted drum in foreground and stagnant water in channel. Also note railroad tracks in background.



Photo 27: Monitoring Well No. 4 in center of photograph.
Direction of photo is north.



Photo 28: SWMU No. 6 - Settling Pond Drainage Channel; direction of photo is south.



Photo 29: SWMU No. 6 - Settling Pond Drainage Channel; direction of photo is south.



Photo 30: Natural Gas Line (upper left of photograph); note broken pottery on Settling Pond embankment.



Photo 31: Natural Gas Line in cross section of fill.



Photo 32: SWMU No. 6 - Sliphouse Drainage Channel; direction of photo is northwest.



Photo 31: Natural Gas Line in cross section of fill.



Photo 32: SWMU No. 6 - Sliphouse Drainage Channel; direction of photo is northwest.



Photo 33: Production Area - Glazing Spray Booth



Photo 34: Production Area - DUCON Recovery System (Stainless Steel Recovery System)



Photo 35: Production Area - Tanks containing glaze slurry.



Photo 36: Production Area - Excess water holding tank recycled to DUCON.

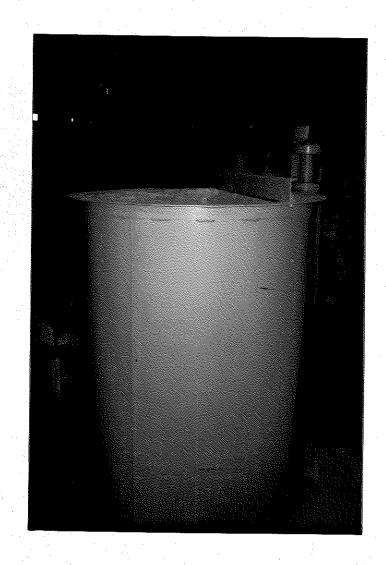


Photo 37: Production Area Tank containing glaze slurry.

VISUAL SITE INSPECTION REPORT

Revision 1

SCIO POTTERY COMPANY SCIO, OHIO

EPA I.D. NO. OHD004465084

Prepared for:

U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Prepared by:

A. T. Kearney, Inc. 222 South Riverside Plaza Chicago, Illinois 60606

Contract No. 68-01-7374 Work Assignment No. R25-01-09

September 18, 1987

VISUAL SITE INSPECTION REPORT

FOR

SCIO POTTERY COMPANY SCIO, OHIO

Table of Contents

Section	Title	Page
I.	EXECUTIVE SUMMARY	I - 1
II.	INTRODUCTION	II - 1
III.	FACILITY AND PROCESS INFORMATION	III - 1
	A. GENERAL INFORMATION B. WASTE STREAMS	
IV.	ENVIRONMENTAL SETTING	IV - 1
٧.	SOLID WASTE MANAGEMENT UNITS	V - 1
VI.	OTHER AREAS OF CONCERN	VI - 1
VII.	REFERENCES	VII - 1
	ATTACHMENTS:	
	A. VISUAL SITE INSPECTION TRIP REPORT B. PHOTO LOG C. VISUAL SITE INSPECTION FIELD NOTES	

I. EXECUTIVE SUMMARY

A Visual Site Inspection (VSI) was performed at Scio Pottery Company in Scio, Ohio, to identify and evaluate Solid Waste Management Units (SWMUs) and Other Areas of Concern, and to provide the U.S. EPA Region V permit writer with a first-hand view of the facility prior to review of the facility's closure plan.

Scio Pottery Company is a manufacturer of semi-vitreous whiteware and dinnerware. The plant was built in 1911, and has been shut down since February 1985 while undergoing substantial renovation. While in operation, the facility generated wastewater from its sliphouse and glazing operations. The major portion of the wastes generated by these operations was recycled. However, a dilute side-stream was discharged into a settling pond on the facility's property prior to discharge to nearby Conotton Creek. Lead contamination has been found in the Settling Pond as a result of these discharges. The contamination results from the previous use of lead in facility glazing operations.

Seven SWMUs and two Other Areas of Concern have been identified as a result of the Visual Site Inspection. These are listed below:

Solid Waste Management Units

- 1. Waste Drum Storage Area
- 2. Scrap Storage Area
- 3. Oil Storage Area
- 4. Renovation Debris Waste Storage Area
- 5. Broken Pottery Fill Area
- 6. Settling Pond
- 7. Machine Shop/Used Kerosene Tank

Other Areas of Concern

- 1. Underground Storage Tank
- 2. Aboveground Storage Tank

II. INTRODUCTION

A Visual Site Inspection (VSI) was conducted at the Scio Pottery Company in Scio, Ohio to identify Solid Waste Management Units (SWMUs) and Other Areas of Concern (OACs) as part of the RCRA Facility Assessment (RFA). The VSI also provided the U.S. EPA permit writer with a first-hand view of the facility prior to review of the facility's closure plan. The VSI occurred on May 14, 1987.

This report presents the results of the VSI. All information and conclusions are based on information gathered during the Visual Site Inspection and on information previously gathered by U.S. EPA.

The facility process information and historical perspective contained in this report are based almost entirely on information collected during the VSI. Due to the length of time this facility has been operating (since 1911), facility representatives present during the VSI were unable to provide detailed information regarding to previous waste management practices.

III. FACILITY AND PROCESS DESCRIPTION

A. General Information

Scio Pottery Company (Figures 1 and 2) is a pottery-making company, located in the town of Scio, Ohio in the northwest section of Harrison County. The facility is a manufacturer of semi-vitreous whiteware and dinnerware. The plant was built in 1911, placed on standby in 1924, and started up again in 1933. The company incorporated as Scio Pottery in 1933. The facility has been out of production since February 1985 due to a major plant renovation (References 4 and 7).

The facility is bounded to the northeast by a New York-Pennsylvania railroad track, and Conotton Creek. The remainder of the facility is bounded by residential areas. The estimated population of Scio, Ohio is 1,000. A potable water well is located within the facility boundary (Reference 7).

Prior to 1985, the facility had been using kilns fired with natural gas for its pottery manufacturing operatons. Due, in large part, to the high cost of natural gas, the facility closed down. The facility may reopen under a plan to use coal-fired cogeneration using high-sulfur Ohio coal to fire electric kilns and provide heat for ceramic dryers. The facility has received a grant from the Ohio Coal Development Office for a study to determine the feasibility of a cogeneration system using a rotary

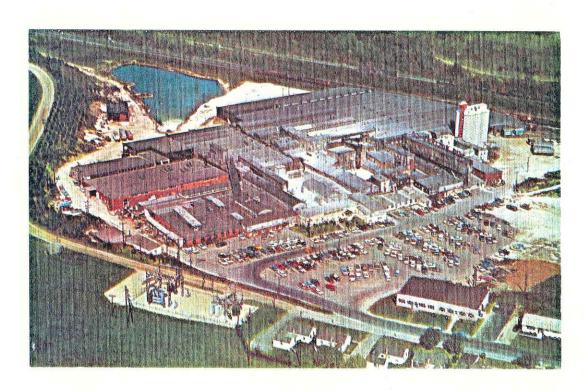


Figure 1 Aerial View of Scio Pottery

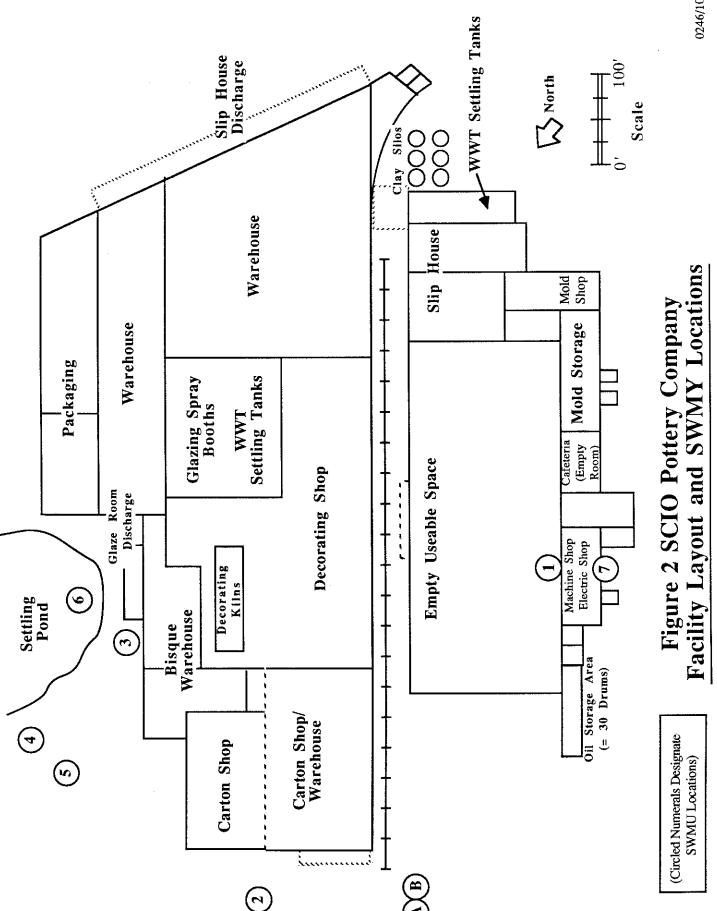
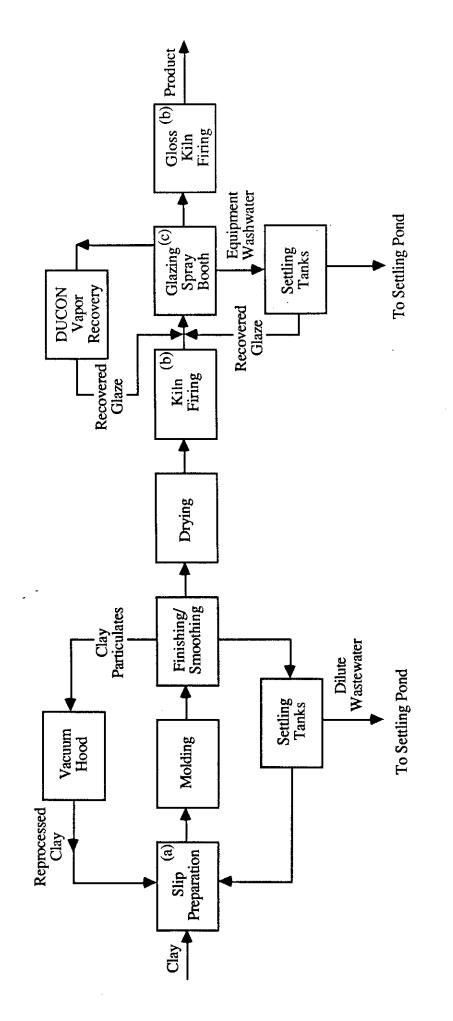


Figure 3 Process Flow Diagram Scio Pottery Company



a = Liquid Clay

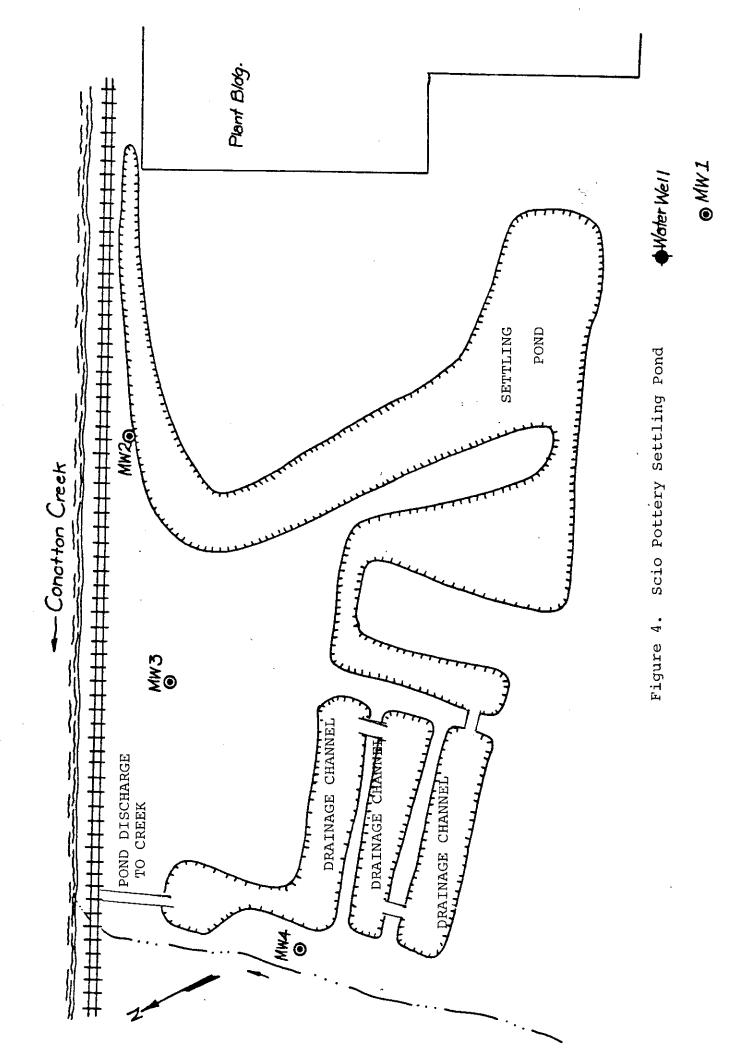
b = Previous operations used a natural-gas fired kiln.Future operations will use an electric kiln.

c = Glaze used on process line contained lead until 10-15 years ago.

B. Waste Streams

While in operation, the facility generated wastewater from their slip preparation and glazing operations (98% of the wastewater was generated during slip production). The wastewater was discharged into a Settling Pond (SWMU No. 1) behind the manufacturing plant that eventually flowed into Conotton Creek (Figure 4). Wastewater has been discharged into the Settling Pond since the 1950s (Reference 4, 7). The amount of industrial wastes produced annually and flow rate are unknown. Prior to approximately 1974, lead was used in the glazing process line (Reference 7). Wastewater containing lead was discharged into the Settling Pond (SWMU No. 1). As a result, lead contamination has been found in the Settling Pond. Some sludge and dredging samples from the settling pond have exhibited EP toxic characteristics due to lead in excess of the toxicity limit of 5.0 mg/l (Reference 4).

The wastewater contained suspended solids from clay powders including: bulk kaoline, carver (coarse kaoline), feldspar, talc, and flint. The NPDES limit for discharge of suspended solids into Conotton Creek is 8 pounds per 24 hours (Reference 7).



IV. ENVIRONMENTAL SETTING

Climatology: The climate of Harrison County is mild and temperate. The average yearly maximum temperature is 61.6°F., and the daily minimum is 41.2°F. The lowest temperatures occur in January, with a an average minimum daily temperature of 19.2°F. The highest temperatures occur in July with an average maximum daily temperature of 83°F. Precipitation, approximately 38 inches per year, is fairly well distributed throughout the year, with the highest amount of rainfall occurring in July (approximately 4.3 inches) (Reference 12).

Soils: Soils in the vicinity of the facility are classified as the Newark-Monogahela Association. The Newark soils are characterized as nearly level and poorly drained soils of floodplains; Monogahela soils are characterized as nearly level to sloping, moderately well-drained soils of stream terraces (Reference 9). Monogahela soils are formed in thick silty materials and have a compact, brittle subsoil layer at a depth of about 2 feet. This layer tends to impede percolation of water (Reference 9).

Topography: The Scio Pottery Company is located in Harrison County, Ohio. Harrison County is part of the Appalachian physiographic province which is a broad dissected upland underlain by essentially horizontal, finely grained, sedimentary rocks. The surface consists chiefly of broad, rounded ridges and intervening V-shaped valleys. The site's surface has an elevation change of plus or minus 10 feet from the southern end to the discharge site at Conotton Creek. Drainage to Conotton Creek is usually maintained under normal conditions (Reference 2).

Surface Water: Scio Pottery is bordered by the southern bank of Conotton Creek. This perennial stream flows northwest to the Tuscarawas River. The confluence is located at Zoar, Ohio, approximately 70 miles northwest of the facility (Reference 1).

Geology and Hydrogeology:

A. Regional Geology

The northern portion of Harrison County is an area of moderate relief characterized by a thin soil developed upon unglaciated bedrock of Pennsylvanian age. The bedrock is comprised of alternating beds of shale, sandstone and limestone; which dip to the southeast. These strata have been dissected by numerous streams forming erosional valleys filled with varying thicknesses of

alluvial sand and gravel. Conotton Creek has developed a narrow floodplain and has formed deposits of alluvium varying in thickness from 5 feet to 80 feet (Reference 1, 2).

The base flow of Conotton Creek indicates that the saturated zone in the alluvium is 8 to 12 feet below ground. The recharge to this zone is mainly through infiltration from the surrounding hillsides. The alluvium is also recharged from Conotton Creek during periods of high flow (Reference 2).

The next descending water bearing zone has a piezometric head approximately 30 feet below the surface and is located in sandstone and sandy shale strata of the bedrock. Although the depth to bedrock varies widely in this region, the average depth is approximately 30 feet below ground surface. Recharge to this zone is directly from: precipitation in upstream elevations where the bedrock crops out; and by percolation downward from the perched aquifers on the hill, or from the shallow alluvial aquifer. Two wells in the vicinity of the facility have developed capacities of from 50 to 60 GPM with draw-down ranging from 12 to 18 feet over a 12-hour test (Reference 2).

B. Site Conditions

Test drilling on the site indicated that the first 3 to 8 feet of material represented broken pottery fill. At the base of this fill, a natural clay zone was found. Underneath the clay zone, an interbedded series of compacted and tough medium to finegrained clayey sands, silty clays, and stringers of fine sand was encountered; these materials continue to bedrock. The thickness of the clay/sand zone ranged from 6 to 45 feet. Some of these strata were found to exhibit folding and other distortions. surface of the bedrock (sandstone and shale) was weathered to a depth of about one foot. Very little groundwater was found in the unconsolidated materials above the bedrock. The interface layer between the fill and natural soil surface contained small amounts of moisture in the form of a thin perched water table, where percolation has collected (Reference 1).

Air: There are no known studies of air quality at the Scio Pottery facility. As of May, 1987, the facility had no emissions permits.

SWMU No. 1 UNIT NAME:

Waste Drum Storage Area

Unit Description:

This unit is an area approximately 15 feet x 20 feet within the plant production area, north of the machine shop/electric shop. The unit contains approximately ten 55-gallon drums. The unit rests on a concrete

floor.

Date of Start-Up:

Unknown.

Date of Closure:

This unit is currently active.

Wastes Managed:

Waste motor oil and waste paint.

Release Controls:

This unit is located indoors on a

concrete floor.

Release History:

An oil spill was noted during the VSI

on the concrete floor within the drum

storage area.

SWMU No. 1 UNIT NAME:

Waste Drum Storage Area (Cont'd.)

Conclusions:

Soil/Groundwater: This unit is located indoors on a concrete floor; the release potential is low.

<u>Surface Water</u>: This unit is located indoors on a concrete floor; the release potential is low.

<u>Air</u>: This unit is located indoors; the release potential is low.

<u>Subsurface Gas</u>: This unit is located indoors on a concrete floor; the release potential is low.

Suggested Further Actions:

No further action is suggested at this time.

SWMU No. 2 UNIT NAME: Scrap Storage Area

Unit Description:

This unit is an area approximately 30 feet by 40 feet south of the manufacturing building. The area contains scrap metal collected during the current renovation. The scrap metal

rests on bare soil.

Date of Start-Up:

This unit became active in 1985.

Date of Closure:

This unit is currently active. No

closure date is known.

Wastes Managed:

Scrap metal obtained during renovation of the manufacturing building.

Release Controls:

None observed.

Release History:

Not provided.

SWMU No. 2 UNIT NAME:

Scrap Storage Area (Cont'd.)

Conclusions:

Soil/Groundwater: Due to the nature of the wastes, the release potential is low.

<u>Surface Water</u>: Due to the nature of the wastes, the release potential is low.

<u>Air</u>: Due to the nature of the wastes, the release potential is low.

<u>Subsurface Gas</u>: Due to the nature of the wastes, the release potential is low.

Suggested Further Actions:

No further action is suggested at this time.

SWMU No. 3 UNIT NAME:

Oil Storage Area (Reference 7)

Unit Description:

This unit is an old oil storage area, last used for oil storage during World War II. During the current renovation, metal and wooden debris

is stored in this area.

Date of Start-Up:

Unknown.

Date of Closure:

This unit is currently active for storage of debris during the current

renovation.

Wastes Managed:

Wood and metal debris from the current renovation. The unit was last used for oil storage during World War II.

Release Controls:

None noted.

Release History:

Unknown.

SWMU No. 3 UNIT NAME:

Oil Storage Area (Reference 7)

(Cont'd.)

Conclusions:

Soil/Groundwater: Due to the nature of the wastes, the release potential is low.

Surface Water: Due to the nature of the wastes, the release potential is low.

Air: Due to the nature of the wastes, the release potential is low.

Subsurface Gas: Due to the nature of the wastes, the release potential is low.

Suggested Further Actions:

No further action is suggested at this time.

SWMU No. 4 UNIT NAME:

Renovation Debris Waste Storage Area

(Reference 7)

Unit Description:

This unit is a 15 feet by 10 feet area

used to store debris from inside the plant during the current renovation.

Date of Start-Up: 1985.

Date of Closure:

This unit is currently active.

Wastes Managed:

Wood and metal debris from the current

renovation.

Release Controls:

No release controls were noted.

Release History:

Unknown.

SWMU No. 4 UNIT NAME:

Renovation Debris Waste Storage Area

(Reference 7) (Cont'd.)

Conclusions:

Soil/Groundwater: Due to the nature of the wastes, the release potential is low.

Surface Water: Due to the nature of the waste, the release potential is low.

Air: Due to the nature of the wastes, the release potential is low.

Subsurface Gas: Due to the nature of the wastes, the release potential is low.

Suggested Further Actions:

No further action is suggested at this time.

SWMU No. 5 UNIT NAME:

Broken Pottery Fill Area (Reference 7)

Unit Description:

Broken pottery is used as fill in the entire area between the pond and the Settling Pond (SWMU No. 6). The broken pottery domaists of broken

dishes, cups and saucers.

Date of Start-Up:

Unknown.

Date of Closure:

This unit is currently active.

Wastes Managed:

Broken pottery.

Release Controls:

No release controls were noted.

Release History:

Unknown. Apparently, broken pottery

has been used as fill since the facility began operation in 1911.

SWMU No. 5 UNIT NAME: Broken Pottery Fill Area (Reference 7)

(Cont'd.)

Conclusions:

Soil/Groundwater: Due to the nature of the wastes, the release potential is low.

Surface Water: Due to the nature of the wastes, the release potential is low.

Air: Due to the nature of the wastes, the release potential is low.

Subsurface Gas: Due to the nature of the wastes, the release potential is low.

Suggested Further Actions:

No further action is suggested at this time.

SWMU No. 6 UNIT NAME:

Settling Pond/Surface Impoundment

Unit Description:

This unit consists of a surface impoundment with an area of approximately 2 acres. The unit presently contains approximately 25,000 cubic yards of wastewater sludge (Reference 3, 4). The unit is located west of the manufacturing building.

Prior to September 1985, the pond was used as a settling basin. Waste-waters would enter the pond via a below-ground discharge pipe situated at the east end of the pond. Solids settled while the wastewater flowed through the "snake-like" configuration of the pond toward the discharge point into the Conotton Creek.

During the active life of the pond, sludges would accumulate to a thickness that would restrict flow toward the discharge. The facility would then dredge the pond with a drag line and place dredgings on the banks. Another series of "snake-like" drainage channels, which were connected to the original pond, were excavated (size and date unknown). This increased the size of the settling pond and also the hydraulic residence time (Reference 4).

During the VSI, the following observations were noted: broken pottery covered the entire area between the pond and the rear of the building; a below-ground pipe is located at the east end of the pond; vegetation covered approximately 20% of the pond; and several white piles (dredgings) were observed on the banks of the pond. A small amount of standing water was observed in the pond, however there was no discharge from the pond into Conotton Creek (Reference 7).

SWMU No. 6 UNIT NAME:

Settling Pond/Surface Impoundment
(Cont'd.)

The waste pond is located in a narrow valley floor associated with Conotton Creek. The pond is on the southern-most edge of the valley. The floor of the valley is a shallow alluvium along the creek underlain with intermittent, fine-grained alternative layers of sandstone, shale, limestone and coal. The depth to bedrock is between 23 and 28 feet.

Under normal conditions, the bottom of the waste pond is above the water table. The pond floor is composed mainly of a clayey material creating low infiltration rates (Reference 2).

Date of Start-Up:

The facility has discharged wastewaters into the surface impoundment since the 1950s (Reference 4).

Date of Closure:

This unit has been inactive since February 1985 (Reference 4).

Wastes Managed:

Wastes managed are sludges generated in slip and glazing operations. Sludge and dredging samples from the pond have exhibited EP toxic characteristics due to lead (D008) in excess of the toxicity limit of 5.0 mg/l (Reference 4).

Release Controls:

No release controls were noted. The unit is unlined. Four monitoring wells have recently been installed in the vicinity of this unit (see Figure 4) (Reference 7).

Release History:

A surface water sample taken at the Scio Outfall in September 1982 showed lead levels of 94 ug/l (Reference 3). Lagoon sludge samples taken in March 1985 showed lead levels of 569,000 ug/l. Groundwater monitoring data is currently unavailable.

SWMU No. 6 UNIT NAME:

Settling Pond/Surface Impoundment
(Cont'd.)

Conclusions:

Soil/Groundwater: The release potential is high due to the unlined nature of the unit. Wastewater and sludges contained elevated lead levels.

<u>Surface Water</u>: Releases to Conotton Creek have been documented. Elevated lead levels were found in samples collected at the discharge from the unit to the creek.

<u>Air</u>: The release potential is low due to the nature of the wastes, and the design of the unit.

<u>Subsurface Gas</u>: The release potential is low due to the nature of the wastes.

Suggested Further Actions:

Continue groundwater monitoring to determine the extent of contamination.

UNIT NAME: SWMU No. 7

Machine Shop/Used Kerosene Tank

Unit Description:

This unit consists of a covered 20gallon tank built on 4 legs, perched 4 inches above a concrete floor. machine shop is locked during the current renovation, therefore no

photo is available.

Date of Start-Up:

No provided.

Date of Closure:

This unit is currently active. However, the machine shop is being kept locked during the current

renovation.

Wastes Managed:

Waste kerosene.

Release Controls:

The unit is located indoors and sits 4 inches above a concrete floor.

Release History:

The North Township of Harrison County previously used the waste kerosene to spray the township roads. This prac-

tice ended several years ago

(Reference 7).

SWMU No. 7 UNIT NAME:

Machine Shop/Used Kerosene Tank (Cont'd.)

Conclusions:

Soil/Groundwater: The release potential is low; this unit is located indoors, on legs above a concrete floor.

<u>Surface Water</u>: The release potential is low; this unit is located indoors.

<u>Air</u>: The release potential is low; this unit is covered and located indoors.

<u>Subsurface Gas</u>: The release potential is low; this unit is on legs above a concrete floor.

Suggested Further Actions:

No further action suggested at this time.

SWMU No. 8 UNIT NAME: Production Area Slip Settling Tanks (Reference 7)

Unit Description:

This unit consists of four below ground tanks located in the slip Each unit is constructed of house. concrete and has an approximate volume of 100 cubic feet (4 foot width x 4 foot length x 6 foot depth); the total volume is approximately 400 cubic feet.

The tanks are used to settle dilute slip (liquid clay) which is manually recycled to the slip house (see Figure 3). A small side stream of wastewater containing dilute clay is discharged to the settling pond (SWMU No. 6).

The unit is shown in Photo 13.

Date of Start-Up:

The facility has discharged dilute slip into the settling tanks since the 1950s.

Date of Closure:

This unit has been inactive since February 1985 during the current renovation. According to facility representatives, the unit will become active again when the facility starts up.

Wastes Managed:

Wastes managed are dilute slip (liquid clay) from the slip operations.

Release Controls:

The unit is located indoors. in-ground tanks are constructed of concrete. The units appeared to be in good condition during the VSI (i.e., no cracks were evident).

Release History:

No releases have been documented from this unit.

SWMU No. 8 UNIT NAME:

Production Area Slip Settling Tanks (Reference 7) (Cont'd.)

Conclusions:

Soil/Groundwater: The release potential is low; this unit is located indoors and lined with concrete. During the VSI the units appeared to be in good condition.

<u>Surface Water</u>: The release potentials is low; this unit is located indoors and is lined with concrete.

<u>Air</u>: The release potential is low; this unit is located indoors and manages liquid clay.

Subsurface Gas: The release potential is low due to the wastes managed (liquid clay).

Suggested Further Actions:

No further action is suggested at this time.

SWMU No. 9 UNIT NAME:

Glaze Recovery Tank (Reference 7)

Unit Description:

This unit consists of a 250 gallon tank used for recovering glazes. The unit is a steel tank which rests on a

concrete floor.

A small side stream of dilute glaze is discharged to the settling pond (SWMU No. 6). The unit is shown in

Photo 37.

Date of Start-Up:

This unit has been used to recover

glaze since the 1950s.

Date of Closure:

This unit has been inactive since February 1985 during the current renovation. According to facility representatives, the unit will become active again once the facility starts

up.

Wastes Managed:

This unit handles dilute glaze. Prior to 1974, lead was used in the

glazing process line.

Release Controls:

The unit is located indoors and rests

on a concrete floor.

Release History:

No releases have been documented from

this unit.

SWMU No. 9 UNIT NAME:

Glaze Recovery Tank (Reference 7)

(Cont'd.)

Conclusions:

<u>Soil/Groundwater</u>: The release potential is low; the unit is located indoors, rests on a concrete floor and is in a steel tank.

<u>Surface Water</u>: The release potential is low; the unit is located indoors.

<u>Air</u>: The release potential is low; the unit is located indoors and manages liquid glaze.

<u>Subsurface Gas</u>: The release potential is low due to the waste managed (liquid glaze).

Suggested Further Actions:

No further action is suggested at this time.

VI. OTHER AREAS OF CONCERN

AREA OF CONCERN A: <u>UNDERGROUND STORAGE TANK</u> (Reference 7)

Unit Description: This unit is an underground gasoline

storage tank, with a capacity of 1,000 gallons. The unit is located west of the manufacturing building.

Date of Start-Up: Not provided.

Date of Closure: This unit is currently active.

Wastes Managed: This unit is used to store gasoline.

Release Controls: The facility representative was

unable to identify any internal or

external protection.

Release History: Unknown

AREA OF CONCERN A: UNDERGROUND STORAGE TANK (Reference 7) (Cont'd.)

Conclusions:

<u>Soil/Groundwater</u>: The release potential is high; the age of the tank and its integrity are not known. In addition, there is no known internal or external protection.

<u>Surface Water</u>: In the event of spill or leakage, the release potential is high; this unit is located approximately 20 feet from the Settling Pond (SWMU No. 1).

<u>Air</u>: The release potential is low; this unit is located underground.

<u>Subsurface Gas</u>: The potential for generation is high if a spill occurs; under anoxic conditions, gasoline may decompose to form methane gas.

Suggested Further Actions:

This unit is subject to underground storage tank regulations. The units should be regularly inspected to confirm its integrity.

AREA OF CONCERN B: ABOVEGROUND STORAGE TANK (Reference 7)

Unit Description: This unit is an aboveground kerosene

storage tank, with a capacity of 500 gallons. The unit is located west of

the manufacturing building.

Date of Start-Up: Not provided.

Date of Closure: This unit is currently active.

Wastes Managed: This unit is used to store kerosene.

Release Controls: The unit rests on a concrete pad.

Release History: Unknown.

AREA OF CONCERN B: ABOVEGROUND STORAGE TANK (Reference 7) (Cont'd.)

Conclusions:

Soil/Groundwater: The release potential is dependent on the integrity of the unit. The age of the tank is unknown and is rusted in small areas.

<u>Surface Water</u>: The release potential is dependent on the integrity of the unit.

Air: The release potential is dependent on the integrity of the unit.

<u>Subsurface Gas</u>: The release potential is low due to the nature of the unit.

Suggested Further Actions:

The unit should be regularly inspected to confirm its integrity.

VII. REFERENCES

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- 12. National Oceanic and Atmospheric Administration, Climates of the States (Cadiz, Ohio), Gale Publishing Co., 1985.

ATTACHMENT A

VSI TRIP REPORT

SCIO POTTERY COMPANY SCIO, OHIO

INTRODUCTION

This VSI Trip Report summarizes the activities and observations of representatives of A. T. Kearney and U.S. EPA Region V during the May 14, 1987 site visit to the Scio Pottery Company in Scio, Ohio. Observations and findings from the VSI have been incorporated into the main body of this report.

VSI SUMMARY

The following individuals were present for the VSI:

Name	Representative of:
Vanessa Harris	A. T. Kearney, Inc.
Pratap Singh	A. T. Kearney, Inc.
Lisa Pierard	U.S. EPA, Region V
Steve Reese	Scio Pottery

An opening meeting was held at 10:00 A.M. on the morning of Thursday, May 14, to discuss the purpose of the site visit, the SWMUs, and the planned itinerary. Steve Reese summarized the process operations that take place at the facility and supplied additional information regarding the Settling Pond (SWMU No. 1) identified in the information provided by U.S. EPA. Following this meeting, the reviewers were taken on a tour of the facility,

focusing on observing the SWMU identified in the information review (Settling Pond), and identifying additional SWMUs throughout the property.

During the visual site inspection, photographs were taken by Pratap Singh of A. T. Kearney using a standard 35mm SLR Camera.

No special filters or lenses were used. Fuji 400 ASA color print film was used.

Following the walk-through inspection of the facility, a meeting was held with the facility representatives to discuss information gaps and to identify further information needs. The visit ended at approximately 3:20 P.M.

The weather on May 14, 1987 was warm and sunny. The temperature was around $80\,^{\circ}\text{F}$.

PHOTO LOG

The photographs on the following pages document the observations made during the VSI.

ATTACHMENT B SCIO POTTERY COMPANY VISUAL SITE INSPECTION REPORT

PHOTO LOG

ATTACHMENT B SCIO POTTERY COMPANY VISUAL SITE INSPECTION REPORT

PHOTO LOG

PHOTO LOG

Index of Photographs

Photo Number	SWMU Number	Photo Number	SWMU Number
1	-	20	6
2	-	21	6
3	-	22	
4	-	23	6
5	-	24	6
6	-	25	6
7	-	26	6
8	-	27	_
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Photo 1: SWMU no. 1 — Settling Pond; direction of photo is east. Note embankment covered with broken pottery.



Photo 2: SWMU No. 1 -- Settling Pond; direction of photo is east. Note discharge pipe in photo center.



Photo 3: SWMU No. 1 -- Settling Pond; direction of photo is south.



Photo 4: SWMU No. 1 -- Settling Pond Drainage Channel; direction of photo is east. Note rusted drum in foreground and stagnant water in channel. Also note railroad tracks in background.



Photo 5: SWMU No. 1 -- Settling Pond Drainage Channel; direction of photo is south.



Photo 6: SWMU No. 3 -- Scrap Storage Area; direction of photo is north.



Photo 7: Other Area of Concern -- Underground Storage Tank; direction of photo is south. The unit is in the area of the gasoline pump.

ATTACHMENT C

SCIO POTTERY COMPANY

VISUAL SITE INSPECTION

FIELD NOTES

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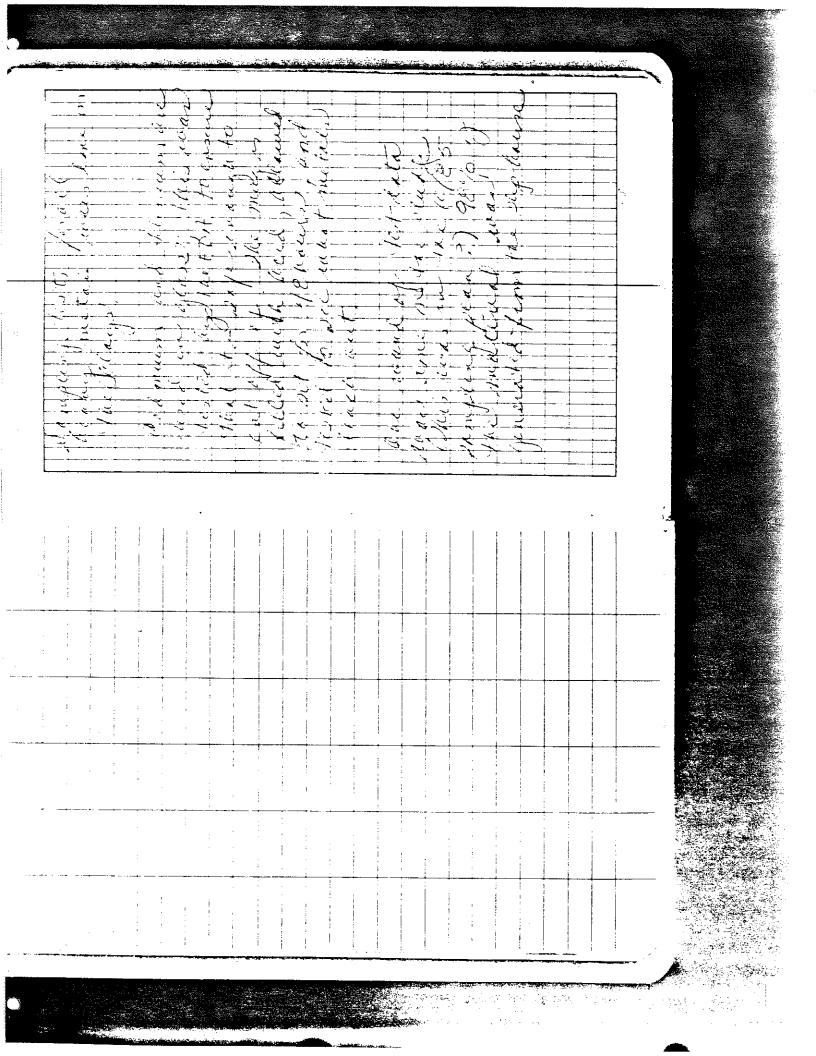
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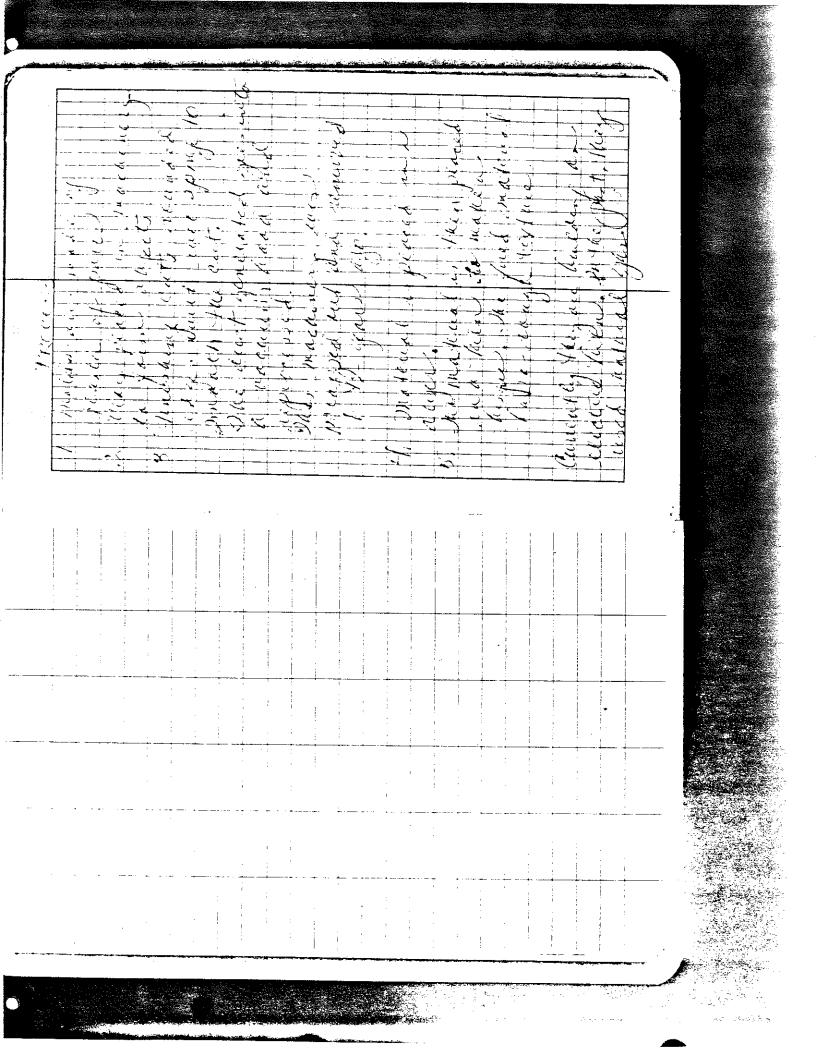
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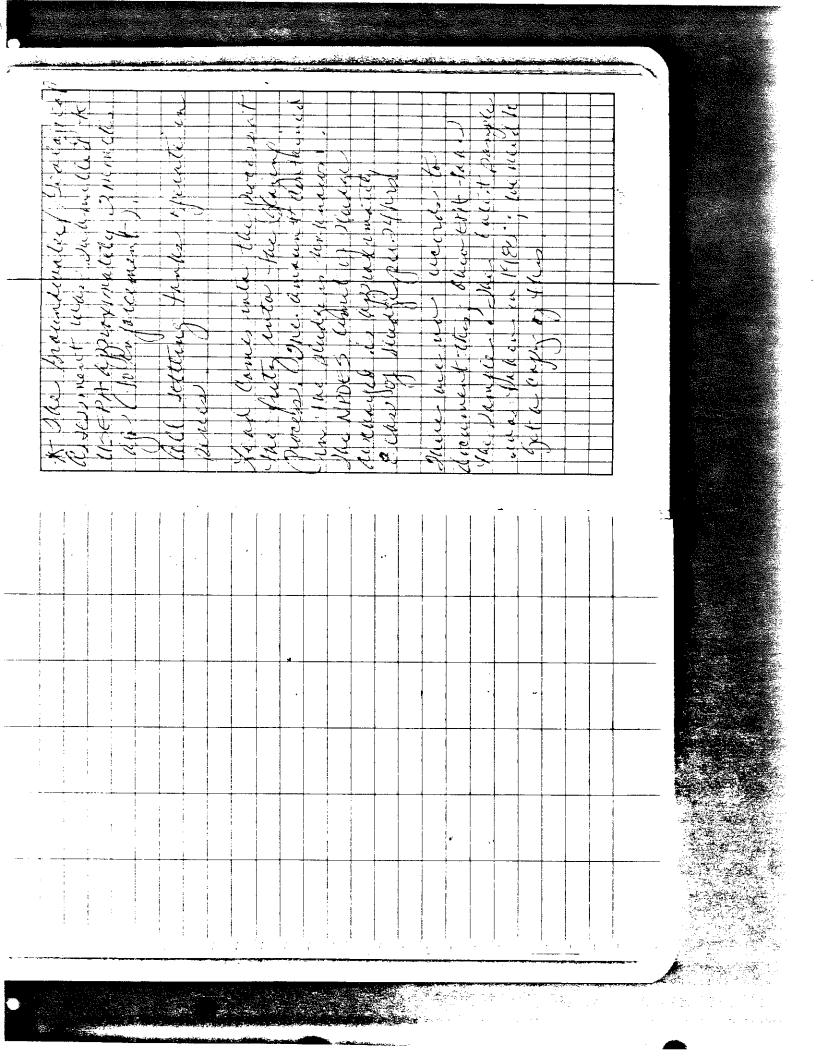


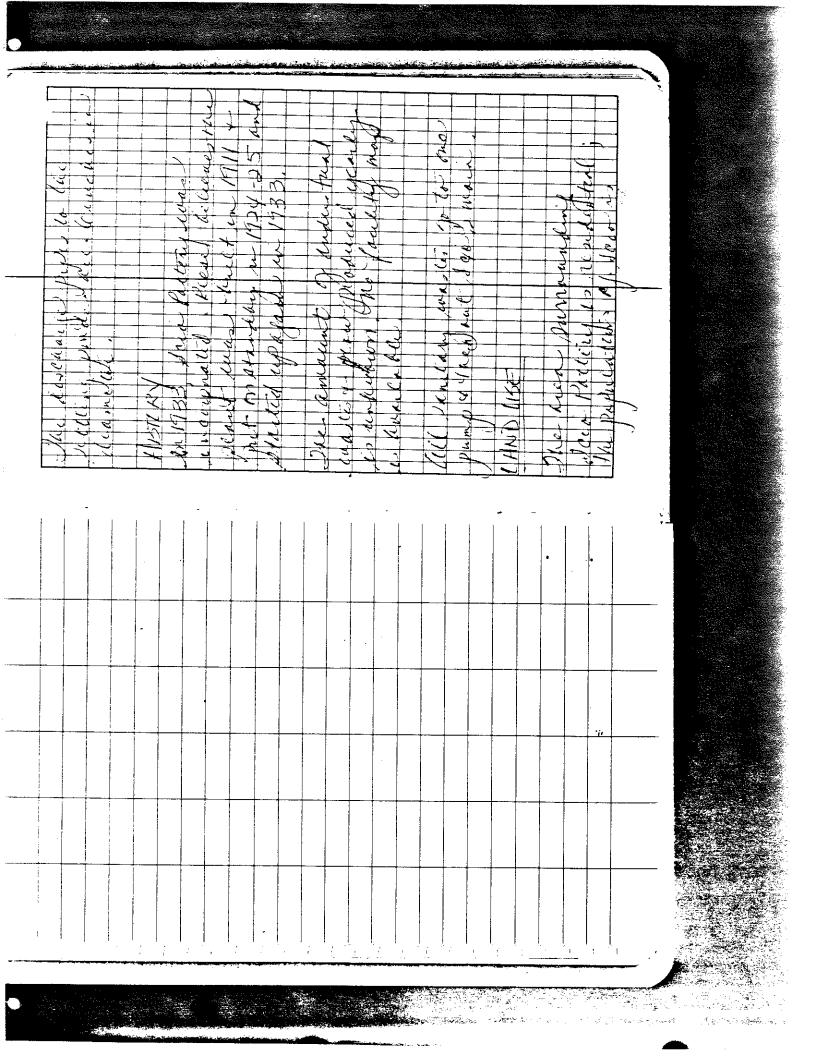
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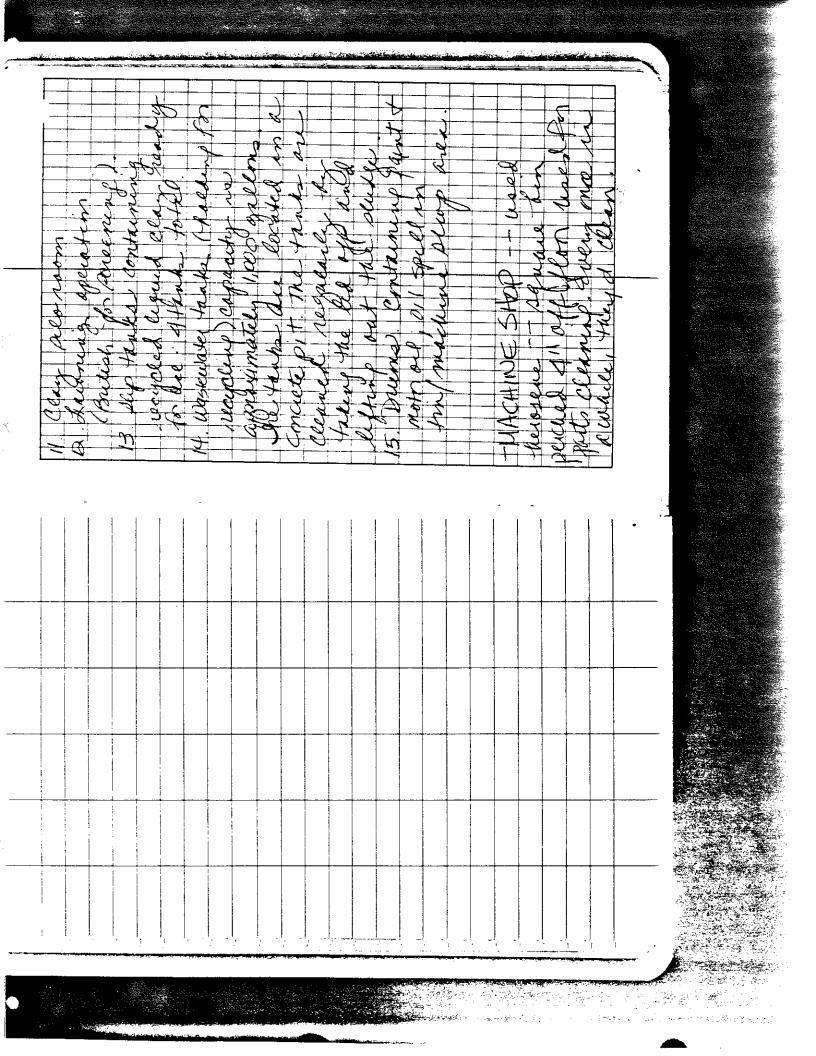
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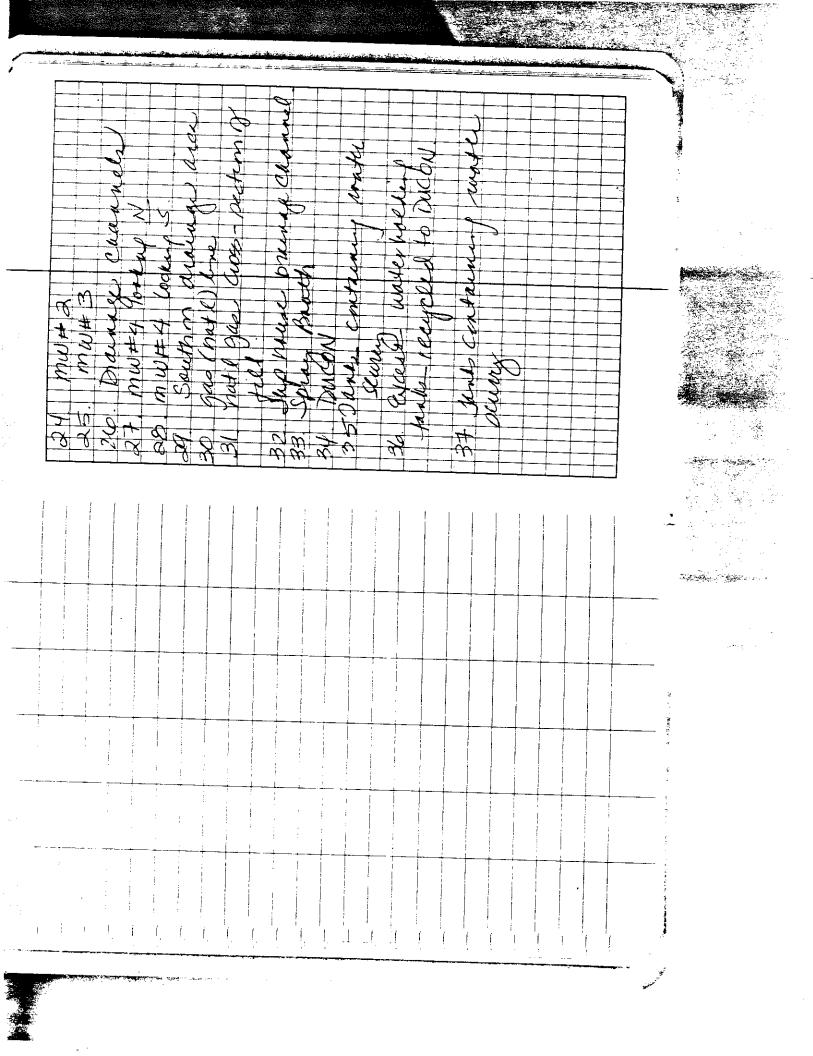
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A.T. Kearney, Inc. 222 South Riverside Plaza Chicago, Illinois 60606 312 648 0111 Management Consultants

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JUN 3 0 1987

SOLID WASTE DRANCH U.S. EPA, REGION V

June 30, 1987

Ms. Pat Vogtman
Regional Project Officer
U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Reference: EPA Contract No. 68-01-7374; Work

Assignment No. R25-01-09; Scio Pottery Company,

Scio, Ohio; Visual Site Inspection Report

Dear Ms. Vogtman:

Enclosed is the Visual Site Inspection (VSI) Report for the Scio Pottery Company in Scio, Ohio. This report presents the results of the VSI portions of the RCRA Facility Assessment (RFA) for this facility. The purpose of the VSI was to provide the U.S. EPA permit writer a first-hand view of the facility prior to review of the facility's closure plan. The VSI Trip Report, VSI Photo Log and Field Log are included as attachments to this report.

Because the scope of the file review was limited to materials provided by EPA, the reasonableness and accuracy of our unit descriptions and conclusions are subject to the limitations of the materials contained in this report. In addition, limited historical information was available from facility representatives on prior waste management practices. Due to the paucity of historical information available, and the age of the site, it is possible that additional SWMUs exist at the facility.

The VSI resulted in the identification of three Solid Waste Management Units -- the Settling Pond, Used Kerosene Tank, and Scrap Storage Area. Because the facility recycles extensively in its process line, few SWMUs are required to handle process waste at the facility. A hydrogeologic investigation and groundwater monitoring program has been initiated for the Settling Pond. In addition, one other area of concern has been identified which is described in this report.

Ms Pat Vogtman June 30, 1987 Page 2

Please feel free to call the undersigned or Vanessa Harris, the Work Assignment Manager, if you have any questions.

Sincerely,

Lee Deets

Technical Director

Don Beasley

Program Director

Encl.

cc: L. Pierard, EPA Region V

J. Grieve

V. Harris

P. Singh

B. Freeman

VISUAL SITE INSPECTION REPORT

SCIO POTTERY COMPANY SCIO, OHIO

EPA I.D. NO. OHD004465084

Prepared for:

U.S. Environmental Protection Agency Region V 230 South Dearborn Street Chicago, Illinois 60604

Prepared by:

A. T. Kearney, Inc. 222 South Riverside Plaza Chicago, Illinois 60606

Contract No. 68-01-7374 Work Assignment No. R25-01-09

June 30, 1987

VISUAL SITE INSPECTION REPORT

FOR

SCIO POTTERY COMPANY SCIO, OHIO

Table of Contents

Section	Title	_Page
I.	EXECUTIVE SUMMARY	I - 1
II.	INTRODUCTION	II - 1
III.	FACILITY AND PROCESS INFORMATION	III - 1
	A. GENERAL INFORMATION B. WASTE STREAMS	
IV.	ENVIRONMENTAL SETTING	IV - 1
v.	SOLID WASTE MANAGEMENT UNITS	V - 1
VI.	OTHER AREAS OF CONCERN	VI - 1
VII.	REFERENCES	VII - 1
	ATTACHMENTS:	
	A. VISUAL SITE INSPECTION TRIP REPORT B. PHOTO LOG C. VISUAL SITE INSPECTION FIELD NOTES	

I. EXECUTIVE SUMMARY

A Visual Site Inspection (VSI) was performed at Scio Pottery Company in Scio, Ohio, to identify and evaluate Solid Waste Management Units (SWMUs) and Other Areas of Concern, and to provide the U.S. EPA Region V permit writer with a first-hand view of the facility prior to review of the facility's closure plan.

Scio Pottery Company is a manufacturer of semi-vitreous whiteware and dinnerware. The plant was built in 1911, and has been shut down since February 1985 while undergoing substantial renovation. While in operation, the facility generated wastewater from its sliphouse and glazing operations. The major portion of the wastes generated by these operations was recycled. However, a dilute side-stream was discharged into a settling pond on the facility's property prior to discharge to nearby Conotton Creek. Lead contamination has been found in the Settling Pond and Conotton Creek as a result of these discharges. The contamination results from the previous use of lead in facility glazing operations.

Three SWMUs and one Other Area of Concern has been identified as a result of the Visual Site Inspection. These are listed below:

Solid Waste Management Units

- 1. Settling Pond
- 2. Machine Shop/Used Kerosene Tank
- 3. Scrap Storage Area

Other Area of Concern

Underground Storage Tank

II. INTRODUCTION

A Visual Site Inspection (VSI) was conducted at the Scio Pottery Company in Scio, Ohio to identify Solid Waste Management Units (SWMUs) and Other Areas of Concern (OACs) as part of the RCRA Facility Assessment (RFA). The VSI also provided the U.S. EPA permit writer with a first-hand view of the facility prior to review of the facility's closure plan. The VSI occurred on May 14, 1987.

This report presents the results of the VSI. All information and conclusions are based on information gathered during the Visual Site Inspection and on information previously gathered by U.S. EPA.

The facility process information and historical perspective contained in this report are based almost entirely on information collected during the VSI. Due to the length of time this facility has been operating (since 1911), facility representatives present during the VSI were unable to provide detailed information regarding to previous waste management practices.

III. FACILITY AND PROCESS DESCRIPTION

A. General Information

Scio Pottery Company (Figures 1 and 2) is a pottery-making company, located in the town of Scio, Ohio in the northwest section of Harrison County. The facility is a manufacturer of semi-vitreous whiteware and dinnerware. The plant was built in 1911, placed on standby in 1924, and started up again in 1933. The company incorporated as Scio Pottery in 1933. The facility has been out of production since February 1985 due to a major plant renovation (References 4 and 7).

The facility is bounded to the northeast by a New York-Pennsylvania railroad track, and Conotton Creek. The remainder of the facility is bounded by residential areas. The estimated population of Scio, Ohio is 1,000. A potable water well is located within the facility boundary (Reference 7).

Prior to 1985, the facility had been using kilns fired with natural gas for its pottery manufacturing operatons. Due, in large part, to the high cost of natural gas, the facility closed down. The facility may reopen under a plan to use coal-fired cogeneration using high-sulfur Ohio coal to fire electric kilns and provide heat for ceramic dryers. The facility has received a

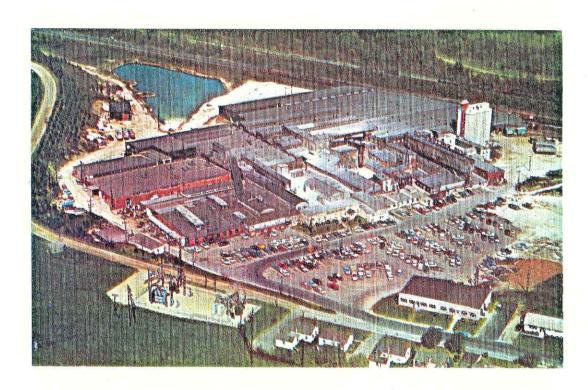


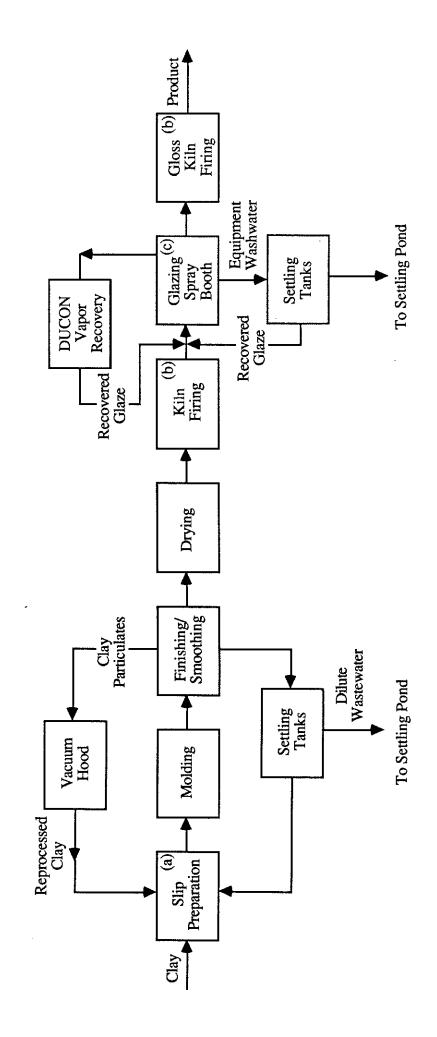
Figure 1 Aerial View of Scio Pottery

grant from the Ohio Coal Development Office for a study to determine the feasibility of a cogeneration system using a rotary cascading bed boiler. The rotary cascading boiler is similar to a fluidized bed boiler, except that the coal combustor uses mechanical action instead of air to mix and compress the coal (Reference 5-7).

The pottery manufacturing process (Figure 3) involved: a) forming plaster of paris molds; b) placing the slip (liquid clay) in the molds to form the ware; c) finishing/smoothing each piece; d) drying on a conveyor belt; e) firing in a kiln; f) automatic machine glazing; and g) re-firing in a gloss kiln. Liquid clay used in the slip house, as well as glaze used in the spray booth, were recycled through settling tanks. Dilute wastewater from both sets of settling tanks was discharged to the waste settling pond (SWMU No. 1). Prior to 1985, a small product-line was glazed using the hand-dipped process.

Glazes are thin layers of glass fused on to the surface of the pottery-ware. Glazes containing lead aluminosilicate additives were commonly used in pottery-making, because lead imparts brilliance, hardness and smoothness. Lead glazes are also less susceptible to minor variations in firing temperature (Reference 8).

Figure 3 Process Flow Diagram Scio Pottery Company



a = Liquid Clay

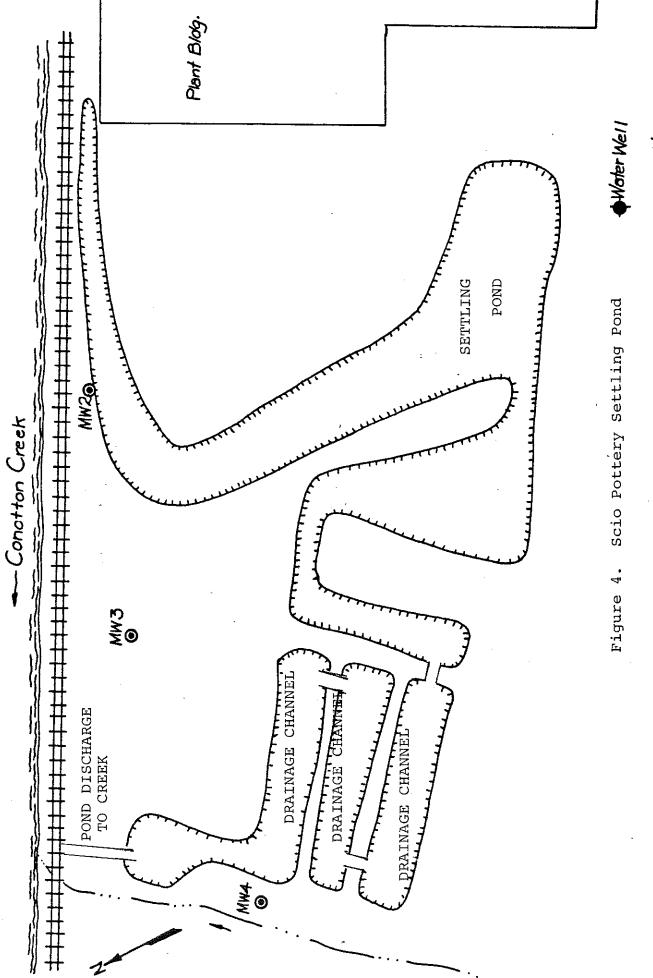
b = Previous operations used a natural-gas fired kiln. Future operations will use an electric kiln.

c = Glaze used on process line contained lead until 10-15 years ago.

B. Waste Streams

While in operation, the facility generated wastewater from their slip preparation and glazing operations (98% of the wastewater was generated during slip production). The wastewater was discharged into a Settling Pond (SWMU No. 1) behind the manufacturing plant that eventually flowed into Conotton Creek (Figure 4). Wastewater has been discharged into the Settling Pond since the 1950s (Reference 4, 7). The amount of industrial wastes produced annually and flow rate are unknown. Prior to approximately 1974, lead was used in the glazing process line (Reference 7). Wastewater containing lead was discharged into the Settling Pond (SWMU No. 1). As a result, lead contamination has been found in both the Settling Pond and Conotton Creek. Some sludge and dredging samples from the settling pond have exhibited EP toxic characteristics due to lead in excess of the toxicity limit of 5.0 mg/1 (Reference 3).

The wastewater contained suspended solids from clay powders including: bulk kaoline, carver (coarse kaoline), feldspar, talc, and flint. The NPDES limit for discharge of suspended solids into Conotton Creek is 8 pounds per 24 hours (Reference 7).



• MW1

IV. ENVIRONMENTAL SETTING

Climatology: The climate of Harrison County is mild and temperate. The average yearly maximum temperature is 61.6°F., and the daily minimum is 41.2°F. The lowest temperatures occur in January, with a an average minimum daily temperature of 19.2°F. The highest temperatures occur in July with an average maximum daily temperature of 83°F. Precipitation, approximately 38 inches per year, is fairly well distributed throughout the year, with the highest amount of rainfall occurring in July (approximately 4.3 inches) (Reference 12).

Soils: Soils in the vicinity of the facility are classified as the Newark-Monogahela Association. The Newark soils are characterized as nearly level and poorly drained soils of floodplains; Monogahela soils are characterized as nearly level to sloping, moderately well-drained soils of stream terraces (Reference 9). Monogahela soils are formed in thick silty materials and have a compact, brittle subsoil layer at a depth of about 2 feet. This layer tends to impede percolation of water (Reference 9).

Topography: The Scio Pottery Company is located in Harrison County, Ohio. Harrison County is part of the Appalachian physiographic province which is a broad dissected upland underlain by essentially horizontal, finely grained, sedimentary rocks. The surface consists chiefly of broad, rounded ridges and intervening V-shaped valleys. The site's surface has an elevation change of plus or minus 10 feet from the southern end to the discharge site at Conotton Creek. Drainage to Conotton Creek is usually maintained under normal conditions (Reference 2).

Surface Water: Scio Pottery is bordered by the southern bank of Conotton Creek. This perennial stream flows northwest to the Tuscarawas River. The confluence is located at Zoar, Ohio, approximately 70 miles northwest of the facility (Reference 1).

Geology and Hydrogeology:

A. Regional Geology

The northern portion of Harrison County is an area of moderate relief characterized by a thin soil developed upon unglaciated bedrock of Pennsylvanian age. The bedrock is comprised of alternating beds of shale, sandstone and limestone; which dip to the southeast. These strata have been dissected by

numerous streams forming erosional valleys filled with varying thicknesses of alluvial sand and gravel. Conotton Creek has developed a narrow floodplain and has formed deposits of alluvium varying in thickness from 5 feet to 80 feet (Reference 1, 2).

The base flow of Conotton Creek indicates that the saturated zone in the alluvium is 8 to 12 feet below ground. The recharge to this zone is mainly through infiltration from the surrounding hillsides. The alluvium is also recharged from Conotton Creek during periods of high flow (Reference 2).

The next descending water bearing zone has a piezometric head approximately 30 feet below the surface and is located in sandstone and sandy shale strata of the bedrock. Although the depth to bedrock varies widely in this region, the average depth is approximately 30 feet below ground surface. Recharge to this zone is directly from: precipitation in upstream elevations where the bedrock crops out; and by percolation downward from the perched aquifers on the hill, or from the shallow alluvial aquifer. Two wells in the vicinity of the facility have developed capacities of from 50 to 60 GPM with draw-down ranging from 12 to 18 feet over a 12-hour test (Reference 2).

B. Site Conditions

Test drilling on the site indicated that the first 3 to 8 feet of material represented broken pottery fill. At the base of this fill, a natural clay zone was found. Underneath the clay zone, an interbedded series of compacted and tough medium to fine-grained clayey sands, silty clays, and stringers of fine sand was encountered; these materials continue to bedrock. The thickness of the clay/sand zone ranged from 6 to 45 feet. Some of these strata were found to exhibit folding and other distortions. The surface of the bedrock (sandstone and shale) was weathered to a depth of about one foot. Very little groundwater was found in the unconsolidated materials above the bedrock. The interface layer between the fill and natural soil surface contained small amounts of moisture in the form of a thin perched water table, where percolation has collected (Reference 1).

<u>Air</u>: There are no known studies of air quality at the Scio Pottery facility. As of May, 1987, the facility had no emissions permits.

SWMU No. 1 UNIT NAME:

Settling Pond/Surface Impoundment

Unit Description: This unit consists of a surface impoundment with an area of approximately 2 acres. The unit presently contains approximately 25,000 cubic yards of wastewater sludge (Reference 3, 4). The unit is located west of the manufacturing building.

> Prior to September 1985, the pond was used as a settling basin. Wastewaters would enter the pond via a below-ground discharge pipe situated at the east end of the pond. Solids settled while the wastewater flowed through the "snake-like" configuration of the pond toward the discharge point into the Conotton Creek.

> During the active life of the pond, sludges would accumulate to a thickness that would restrict flow toward the discharge. The facility would then dredge the pond with a drag line and place dredgings on the banks. series of "snake-like" drainage channels, which were connected to the original pond, were excavated (size and date unknown). This increased the size of the settling pond and also the hydraulic residence time (Reference 4).

> During the VSI, the following observations were noted: broken pottery covered the entire area between the pond and the rear of the building; a below-ground pipe is located at the east end of the pond; vegetation covered approximately 20% of the pond; and several white piles (dredgings) were observed on the banks of the A small amount of standing water was observed in the pond, however there was no discharge from the pond into Conotton Creek (Reference 7).

SWMU No. 1 (Cont'd.)

Settling Pond/Surface Impoundment

The waste pond is located in a narrow valley floor associated with Conotton Creek. The pond is on the southern-most edge of the valley. The floor of the valley is a shallow alluvium along the creek underlain with intermittent, fine-grained alternative layers of sandstone, shale, limestone and coal. The depth to bedrock is between 23 and 28 feet.

Under normal conditions, the bottom of the waste pond is above the water table. The pond floor is composed mainly of a clayey material creating low infiltration rates (Reference 2).

Date of Start-Up: The facility has discharged wastewaters into the surface impoundment since the 1950s (Reference 4).

Date of Closure: This unit has been inactive since February 1985 (Reference 4).

Wastes Managed: Wastes managed are sludges generated in slip and glazing operations. Sludge and dredging samples from the pond have exhibited EP toxic characteristics due to lead (D008) in excess of the toxicity limit of 5.0 mg/l (Reference 4).

Release Controls: No release controls were noted. The unit is unlined. Four monitoring wells have recently been installed in the vicinity of this unit (see Figure 4) (Reference 7).

Release History: A surface water sample taken at the Scio Outfall in September 1982 showed lead levels of 94 ug/l (Reference 3).

Lagoon sludge samples taken in March 1985 showed lead levels of 569,000 ug/l. Groundwater monitoring data is currently unavailable.

SWMU No. 1 (Cont'd.)

Settling Pond/Surface Impoundment

Conclusions:

Soil/Groundwater: The release potential is high due to the unlined nature of the unit. Wastewater and sludges contained elevated lead levels.

Surface Water: Releases to Conotton Creek have been documented. Elevated lead levels were found in samples collected at the discharge from the unit to the creek.

<u>Air</u>: The release potential is low due to the nature of the wastes, and the design of the unit.

<u>Subsurface Gas</u>: The release potential is low due to the nature of the wastes.

Suggested Further Actions:

Continue groundwater monitoring to determine the extent of contamination.

SWMU No. 2 UNIT NAME:

Machine Shop/Used Kerosene Tank

Unit Description: This unit consists of a covered

20-gallon tank built on 4 legs, perched 4 inches above a concrete floor. The

machine shop is locked during the

current renovation, therefore no photo

is available.

Date of Start-Up: No provided.

Date of Closure: This unit is currently active.

However, the machine shop is being kept locked during the current renovation.

Wastes Managed: Waste kerosene.

Release Controls: The unit is located indoors and sits 4

inches above a concrete floor.

Release History: The North Township of Harrison County

previously used the waste kerosene to

spray the township roads. This practice ended several years ago

(Reference 7).

SWMU No. 2 (Cont'd.):

Machine Shop/Used Kerosene Bin

Conclusions:

<u>Soil/Groundwater</u>: The release potential is low; this unit is located indoors, on legs above a concrete floor.

<u>Surface Water</u>: The release potential is low; this unit is located indoors.

<u>Air</u>: The release potential is low; this unit is covered and located indoors.

<u>Subsurface Gas</u>: The release potential is low; this unit is on legs above a concrete floor.

Suggested Further Actions:

No further action suggested at this time.

SWMU No. 3 UNIT NAME:

Scrap Storage Area

Unit Description:

This unit is an area approximately 30

feet by 40 feet south of the

manufacturing building. The area contains scrap metal collected during

the current renovation. The scrap

metal rests on bare soil.

Date of Start-Up:

This unit became active in 1985.

Date of Closure:

This unit is currently active. No

closure date is known.

Wastes Managed:

Scrap metal obtained during

renovation of the manufacturing

building.

Release Controls:

None observed.

Release History:

Not provided.

SWMU No. 3 UNIT NAME:

Scrap Storage Area

Conclusions:

<u>Soil/Groundwater</u>: Due to the nature of the wastes, the release potential is low.

Surface Water: Due to the nature of the wastes, the release potential is low.

Air: Due to the nature of the wastes, the release potential is low.

<u>Subsurface Gas</u>: Due to the nature of the wastes, the release potential is low.

Suggested Further Actions:

No further action is suggested at this time.

VI. OTHER AREAS OF CONCERN

UNDERGROUND STORAGE TANK (Reference 7)

Unit Description: This unit is an underground gasoline

storage tank, with a capacity of 1,000 gallons. The unit is located west of

the manufacturing building.

Date of Start-Up: Not provided.

Date of Closure: This unit is currently active.

Wastes Managed: This unit is used to store gasoline.

Release Controls: The facility representative was unable

to identify any internal or external

protection.

Release History: Unknown

UNDERGROUND STORAGE TANK (Cont'd.)

Conclusions:

Soil/Groundwater: The release potential is high; the age of the tank and its integrity are not known. In addition, there is no known internal or external protection.

Surface Water: In the event of spill or leakage, the release potential is high; this unit is located approximately 20 feet from the Settling Pond (SWMU No. 1).

<u>Air</u>: The release potential is low; this unit is located underground.

<u>Subsurface Gas</u>: The potential for generation is high if a spill occurs; under anoxic conditions, gasoline may decompose to form methane gas.

Suggested Further Actions:

This unit is subject to underground storage tank regulations. The units should be regularly inspected to confirm its integrity.

VII. REFERENCES

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- 5. Raffaele, Patricia, Pottery Manufacturer May Reopen With Coal-Fired Cogeneration, Energy User News, Vol. 1 (No. 1), page 10, October 13, 1986.
- 6. Clean Coal Technology Projects Receive Funding in Ohio, Coal Week, Vol. 12, No. 38, page 3, September 22, 1980.
- 7. VSI Field Log.
- 8. Singer, Felix and Sonja Singer, Industrial Ceramics, Chemical Publishing Co., New York, 1963.
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- U.S. Department of Agriculture, Harrison Soil and Water Conservation District, 1975.
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- National Oceanic and Atmospheric Administration, Climates of the States (Cadiz, Ohio), Gale Publishing Co., 1985.

ATTACHMENT A

VSI TRIP REPORT

SCIO POTTERY COMPANY SCIO, OHIO

INTRODUCTION

This VSI Trip Report summarizes the activities and observations of representatives of A. T. Kearney and U.S. EPA Region V during the May 14, 1987 site visit to the Scio Pottery Company in Scio, Ohio. Observations and findings from the VSI have been incorporated into the main body of this report.

VSI SUMMARY

The following individuals were present for the VSI:

Name	Representative of:
Vanessa Harris	A. T. Kearney, Inc.
Pratap Singh	A. T. Kearney, Inc.
Lisa Pierard	U.S. EPA, Region V
Steve Reese	Scio Pottery

An opening meeting was held at 10:00 A.M. on the morning of Thursday, May 14, to discuss the purpose of the site visit, the SWMUs, and the planned itinerary. Steve Reese summarized the process operations that take place at the facility and supplied additional information regarding the Settling Pond (SWMU No. 1) identified in the information provided by U.S. EPA. Following this meeting, the reviewers were taken on a tour of the facility, focusing on observing the SWMU

identified in the information review (Settling Pond), and identifying additional SWMUs throughout the property.

During the visual site inspection, photographs were taken by Pratap Singh of A. T. Kearney using a standard 35mm SLR Camera. No special filters or lenses were used. Fuji 400 ASA color print film was used.

Following the walk-through inspection of the facility, a meeting was held with the facility representatives to discuss information gaps and to identify further information needs. The visit ended at approximately 3:20 P.M.

The weather on May 14, 1987 was warm and sunny. The temperature was around $80^{\circ}F$.

PHOTO LOG

The photographs on the following pages document the observations made during the VSI.

Steve Reese Scio Pottery Company Post Office Box 565 Scio, Ohio 43988

> RE: Site Visit Scio Pottery Company OHD 004465084

Dear Mr. Reese:

The Hazardous and Solid Waste Amendments (HSWA) of 1984 to the Resource Conservation and Recovery Act (RCRA), requires the United States Environmental Protection Agency (U.S. EPA) to determine the existance of any solid waste management units (SWMUs), at RCRA facilities, and whether any releases have occurred from these units to the environment. The first stage of U.S. EPA's evaluation process is the "Visual Site Inspection" (VSI).

The VSI is scheduled for May 14, 1987, and will be conducted by Ms. Lisa Pierard of the United States Environmental Protection Agency (U.S. EPA), Ms. V. Harris and Mr. P. Singh of A. T. Kearney, Incorporated under contract to U.S. EPA. Enclosed is a copy of the VSI agenda; list of identified solid waste management units; and preliminary information needs. During the VSI, we will be documenting our observations and taking photographs of the identified units.

The U.S. EPA would like to have the appropriate staff and documents available to provide the information as indicated in Attachment 2. Your cooperation during the site visit will be greatly appreciated. If you have any questions, please contact Ms. Pierard at (312) 886-0656.

Sincerely,

George J. Hamper, P.E. Chief, Ohio Technical Unit Technical Programs Section

Enclosures

cc: Susan E. Flannery, Esquire Ed Kitchen, OEPA-SEDO Steve Hamlin, OEPA-SEDO

5HS/Pierard:vw 4/30/87

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Disk #3

April 22, 1987

KEARNEY

Ms. Pat Vogtman
Regional Project Officer
U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, IL 60604

Reference:

EPA Contract No. 68-01-7374; Work Assignment No. R25-01-09, Scio Pottery, Scio, Ohio; EPA ID. No. OHD 004465084; Visual Site Inspection Agenda

Dear Ms. Vogtman:

Enclosed is the Proposed Visual Site Inspection Agenda for Scio Pottery Company. The Identified SWMU List (Attachment 1) and the Preliminary Information Needs list (Attachment 2) are also included.

The VSI has been scheduled for May 14, 1987. If you have any questions, please call me.

Sincerely,

Vanessa Harris

for Work Assignment Manager

cc: L. Pierard, EPA Region V

L. Deets

D. Beasley

B. Freeman

J. Grieve

J. Gers

P. Singh

RCRA FACILITY ASSESSMENT VISUAL SITE INSPECTION AGENDA

FACILITY: The Scio Pottery Company

Scio, Ohio

EPA ID NO: OHD 004465084

FACILITY CONTACT: Steve Reese

DATE OF INSPECTION: May 14, 1987

PERSONNEL: V. Harris, A. T. Kearney, Inc.

P. Singh, A. T. Kearney, Inc.

PURPOSE OF INSPECTION

The Hazardous and Solid Waste Amendments of 1984 (HSWA) broaden the scope of EPA's authority under RCRA by requiring corrective action for releases of hazardous wastes and constituents at facilities that manage hazardous wastes. The RCRA Facility Assessment (RFA) is conducted to evaluate the potential for releases to the environment and the need for corrective action.

The RFA includes a desk-top review of available file information, a visual site inspection of the facility, and, if necessary, a sampling visit. Based on the review of available data for this facility, a visual site inspection (VSI) has been determined to be necessary. The purpose of the VSI is to:

- 1. Survey the site for hydrologic, geologic and surficial features including identification of Solid Waste Management Units (SWMUs), other areas of concern, and identify potential sample points for possible future sampling activities;
- 2. Review the site information with facility representatives. Photographs are to be taken of all units and nearby surface water bodies of concern, including those units located in production areas.

INSPECTION ORGANIZATION

A.T. Kearney personnel will form a two-member team to perform the one-day inspection tour. The team, in general, will inspect process layout of production facilities, waste disposal areas such as surface impoundments and waste piles and release pathways for wastes to get into surface water bodies. An interview with the facility staff will be performed to develop a better understanding of past waste disposal practices. Pertinent geologic information consisting of well logs, USGS topographic maps, plat and zoning maps and surrounding land use patterns will be reviewed. The team will concentrate on developing a better understanding of the vertical and horizontal alignments of the waste piles and surface impoundments. A review of the regional hydrogeology and site specific data will be performed to make an assessment of depth to groundwater and its flow direction in the proximity of the Solid Waste Management Units.

The overall rationale of this inspection plan is to enable the team to trace waste streams from process through treatment/disposal. Some adjustments to the agenda will more than likely be necessary to accommodate facility staffing, geographical location of units and/or operational constraints.

Only units identified in the review with known locations are included in the proposed agenda. A more complete listing of identified units is provided in Attachment 1.

Preliminary information needs have been submitted as Attachment 2 to aid Scio Pottery in preparing for the site visit. These issues will be resolved in a meeting during the VSI. A more efficient agenda may be arranged in order to ensure that all SWMUs identified will be inspected.

PROPOSED INSPECTION SCHEDULE

- o Introductory meeting with Scio personnel and interview with staff.
- o Review of Closure Plan and Groundwater Monitoring Plan.
- o Review well logs, site plan and layouts.
- o Site visit:
 - a) Surface impoundments.
 - b) Waste piles.
 - c) Drainage channels.
 - d) Conotton Creek
- O Close-out meetings the team will meet with Scio Pottery personnel to conclude inspection visit.

ATTACHMENT 1

IDENTIFIED SWMU LIST

- l. Waste Piles
- 2. Surface Impoundments
- 3. Drainage Channels
- 4. Waste Water Discharge Pipe

ATTACHMENT 2

PRELIMINARY INFORMATION NEEDS FOR RCRA FACILITY ASSESSMENT

Waste Characterization and Process Information

- 1. Characterize the chemical composition of the wastes produced in order to identify any hazardous constituents present and the concentrations, if known, during glazing and slip house operations. Provide laboratory analyses, if any, which may have been conducted on these wastes.
- 2. Describe glazing and slip house operations and resulting waste water production. Include any other waste water source in the manufacturing process.

Solid Waste Management Units

- 3. Identify Solid Waste Management Units which have not been identified in the proposed VSI Agenda. Include a brief description of wastes managed in these units and the period of operation. Units to identify include:
 - o Above ground and underground storage tanks, if any.
 - O Waste storage units for hazardous wastes which fall under the 90 day exemption from RCRA.
 - All waste handling areas and associated activities including loading zones, transfer areas and waste accumulation areas.

<u>Historical Perspective</u>

- 4. Confirm that The Scio Pottery Company has been the only operator at the facility since 1933.
- 5. Submit an estimate of industrial waste water production at the facility on a yearly basis. Include periods of high and low wastewater generation.

Miscellaneous

- 6. Provide Facility Maps which identify the location of plant operations and all waste water treatment units. A scale of 1" = 200' is preferable.
- 7. Provide flow diagrams for the facility septic/sewer system.
- 8. Provide flow diagrams for the waste water transport from the building to the surface impoundments.
- 9. Provide a copy of the Closure and Groundwater Monitoring Plans submitted to Ohio EPA and USEPA.
- 10. Provide a log of existing water well and any other site-specific geologic, hydrogeologic and geotechnical data available.

Scio Pottery, Inc. OHD 004 465 084

The VSI was conducted on May 14, 1987. At the time of the inspection the facility was non-operational and had been since February 1985. Scio was in the process of removing most of the old process equipment, for replacement with new computerized equipment. A number of solid waste management units were identified, however most of them were part of the wastewater treatment facility. Discharges from glazing operation occurred to the settling impoundment, lead has been found in the sludge in the impoundment. No other discharges or releases were noted from the facility. Scio Pottery is a LOIS facility that is under an enforcemment order to submit a closure plan for the surface impoundments and dredgings piled on the embankment. Through the closure process all released material from any SWMU will be addressed through removal. No further action is needed through the RFA process.

Susa a. Prierand June 30, 1987

POTENTIAL HAZARDOUS WASTE SITE

LUEN	IFICA	ION
01 STATE	02 SITE	NUMBER

SEPA	PRELIMIN PART 1 - SITE INFO	ARY ASSESSMENT RMATION AND ASSESSMENT	
II. SITE NAME AND LOCATION			
	(4)	02 STREET, ROUTE NO., OR SPECIFIC LOC	ATION IDENTIFIER
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07 OPERATOR (If known and different from owner)			
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POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 2 - WASTE INFORMATION

I. IDENT	TRICATION
01 STATE	02 SITE NUMBER

I. WASTE ST	ATES, QUANTITIES, A	ND CHARACTER	ISTICS				
	ATES (Check all that apply)	02 WASTE QUANT	ITY AT SITE	03 WASTE CHARACTE	RISTICS (Check all that a	paly)	
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ÇC. SLUDGE	≟ G. GAS	CUBIC YARDS	25,000	_ D. PERSIS	TENT H. IGNIT	ABLE :: L, INCOMP. :: M, NOT AP!	
C D. OTHER	(Specify)	NO. OF DRUMS	· ·			_ W. 110 (A.)	
III. WASTE T	YPE						
CATEGORY	SUBSTANCE	NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE			
SLU	SLUDGE		25,000	Cu. yd.	E.P. TOX	ic Sivage	
OLW	OILY WASTE						
SOL	SOLVENTS						
PSD	PESTICIDES						
occ	OTHER ORGANIC	CHEMICALS					
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SEPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT

PART 3 DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

Ìŀ.	IDEN	(IFI	CAT	ION	
01	STATE	02	SITE	NUMBER	

HAZARDOUS CONDITIONS AND INCIDENTS (Continued)				D 441 5050
☐ J. DAMAGE TO FLORA NARRATIVE DESCRIPTION	02 🗆 OBSERVED (DATE:)	☐ POTENTIAL	□ ALLEGED
☐ K. DAMAGE TO FAUNA NARRATIVE DESCRIPTION (Include name(s) of species)	02 - OBSERVED (DATE:)	□ POTENTIAL	□ ALLEGED
I D L. CONTAMINATION OF FOOD CHAIN NARRATIVE DESCRIPTION	02 - OBSERVED (DATE:)	□ POTENTIAL	□ ALLEGED
1 M. UNSTABLE CONTAINMENT OF WASTES (Souther runof (ristending inquidis/leaking drums) 3 POPULATION POTENTIALLY AFFECTED:	02 OBSERVED (DATE:)	☐ POTENTIAL	☐ ALLEGED
D1 IN DAMAGE TO OFFSITE PROPERTY D4 NARRATIVE DESCRIPTION	02 🗀 OBSERVED (DATE:)	☐ POTENTIAL	□ ALLEGED
01 □ O. CONTAMINATION OF SEWERS, STORM DRAINS, W 04 NARRATIVE DESCRIPTION	WTPs 02 COBSERVED (DATE:)	□ POTENTIAL	☐ ALLEGED
01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING 04 NARRATIVE DESCRIPTION	02 - OBSERVED (DATE:)	POTENTIAL	□ ALLEGED
05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR	RALLEGED HAZARDS			
III. TOTAL POPULATION POTENTIALLY AFFECTED: J	UNKNOWN			
V. SOURCES OF INFORMATION (Cité specific references, é. g.,	state liles, sample analysis, reports)			
OEPA District Files		_		



State Of Ohio Environmental Protection Agency

P.O. Box 1049, 361 East Broad St., Columbus, Ohio 43266-0149 (614) 466-8565



Richard F. Celeste, Governor

March 25, 1986

recd -86

Ms. Lisa A. Pierard, Acting Chief Technical Programs Section, Ohio Unit U.S. EPA, Region V 230 South Dearborn Street Chicago, Illinois 60604

Dear Ms. Pierard:

Attached for your further action are Corrective Action Facility Management Plan for Scio Pottery Company (OHD004465084).

Our recommendation is for Federal Judicial Enforcement which is in progress.

Please provide me with any comments you may develop concerning the quality or quantity of this work effort.

If your permit writers have a question of a specific nature please direct them to contact the Ohio EPA District Permit Writer. Any other questions or comments of a programmatic or scheduling issue should be directed to me.

We are on track with the development and scheduling of FMP's. If you have questions, please call.

Sincerely,

Christopha L. Bowen

Christopher L. Bowers, P.E. Manager, Engineering Section

Division of Solid & Hazardous Waste Management

CLB/dhs

Attachments

cc: Charles M. Taylor, Chief, DSHWM
Martha Gibbons, DSHWM
C.O. Section Managers
Steve Hamlin/Ken Dewey, SEDO
Rose Freeman, US EPA, Region V
File: Tom Crepeau w/attachment

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Name of Preparer: Michael Mo Date: 3/12/86	<u> </u>	KOS COT -1 PH 2:27
Model Facility Ma	nagement Plan	PH 2: 27
1. Facility Name: Sciolor	TERY Co.	
2. Facility I.D. Number: OHT	0004465084	• •
3. Owner and/or Operator: Sc	io POTTERY Co.	
4. Facility Location: 355	et Address	
Scio +	APRISON Zhio 4 County State	3988 Zip Code
5. Facility Telephone (if available)6. Interim Status and/or Permi Capacities of Each U	tted Hazardous Waste Units and	<u> </u>
Type of Units	Size or Capacity	Active or Closed
Storage in Tanks or Containers		
Incinerator		
Landfill	1	
Surface Impoundment	(CONTRIVE ADDERY)	INACTIVE,
Waste Pile	15,000 Co. yds	UNCLOSED
Land Treatment	CONTAINS APPROX) 15,000 CO. 4ds. UNENOWN, CONTAINS APPROX. 10,000 CO. 4ds.	(NACTIVE)
Injection Wells	<i>///</i> · · · /	UNCLOSED
Others (Specify)		
7. Permit Application Status:	NEWS (HADMS a	ction item

8. Identification of Hazardous Waste Generated, Treated, Stored or Disposed at the Facility: (may attach Part A or permit list or reference those documents if listing of wastes is exceptionally long - in that case, to complete this question list wastes of greatest interest and/or quantity and note that additional wastes are managed)

Type of Waste Quantity Generated, Treated, Stored or Disposed (note appropriate categories)

WASTE GLAZE AND

SLIP STUDGE, E.P. ±25,000 CU.yds. PREVIOUSLY GENERATED (PLANT Clessed)

Toxic FOR LEAD NOW IN STORAGE

9. Review of Response to Solid Waste Management Questionaire indicates: (check one)
Solid Waste Management Units exist (other than previously identified RCRA units)
No Solid Waste Management Units exist (other than previously identified RCRA units)
It is unclear from review of questionaire whether or not any solid Waste Management Units exist
Respondent indicates that does not know if any Solid Waste Management Units exist
10. If the response to question 9 is that Solid Waste Management Units exist, than check one of the following:
Releases of hazardous waste or constituents have occurred or are thought to have occurred
Releases of hazardous waste or constituents have not occurred
Releases of hazardous waste or constituents have occurred or are thought to have occurred but have been adequately remedied
It is not known whether a release of hazardous waste or constituents has occurred

11. The facility is on the National Priorities List or proposed update of the List
or ERRIS list Yes - indicate List or update
· No
Yes - ERRIS list
Prior to completion of the Recommendation portion of the Facility Management Plan, the attached Appendix must be completed.
12. Recommendation for Regional Approach to the Facility: Check one
Further Investigation to Evaluate Facility
Permit Compliance Schedule
Corrective Action Order (may include compliance schedule)
Other Administrative Enforcement
Federal Judicial Enforcement
Referral to CERCLA for Federally Financed or Enforcement Activity
Voluntary/Negotiated Action
State Action Brief narrative in explanation of selection:
a) If further investigation alternative is selected:
Site inspection - anticipated inspection date
State or Federal inspection
Preliminary Assessment - anticipated completion date
RI/FS - anticipated date of initiation
State/Federal
Private Party identify party(ies)

b) If Permit Alternative is Selected: Projected Schedule
Date of Part B Submission:
Date of Completeness Check:
Date of Completeness theck. Date for Additional Submissions (if required):
Date of Completion of Technical Review:
Completion of Draft Permit/Permit Denial:
Public Notice for Permit Decision:
Date of Hearing (if appropriate):
Date for Final Permit or Denial Issuance:
Description of any corrective action provisions to be included in permit -
c) If Corrective Action Order Alternative is Selected:
Estimated Date for Order Issuance:
Description of Provisions of the Order to be Completed by Facility:
Description of Compliance Schedule to be Contained in Order:
d) If Other Administrative Enforcement Action is Selected:
Projected Date for Issuance of the Order:
Description of Provisions or Goals of the Order:

e) If Judicial Enforcement Alternative Selected:
e) If Judicial Enforcement Alternative Date of Referral to Office of Regional Counsel: 12-85
f) If Referral to CERCLA for Action Selected:
Date of Referral to CERCLA Sections:
g) If Voluntary/Negotiated Action Alternative if Selected:
g) If Voluntary/Negotian Gontact with Facility:
Description of Goals of Contact or Discussions with
Facility:
Date for Termination of Discussions if Not Successful:
Date of Finalization of Settlement if Negotiation Successful:
h) If State Action Alternative is Selected:
Date for Referral to State:
Name of State Contact:
Phone:

APPENDIX

The questions constituting this Appendix to the Facility Management Plan must be filled out prior to completion of recommendation elements of the Plan. The purpose of this appendix is to provide a summary documentation of the State and/or U.S.EPA review of available information on the subject facility. The intent is that a comprehensive file review will be conducted as the basis for selection of the recommended approach to a given facility. If the Appendix is completed by State personnel questions referring to available data reference information in State files; for Federal personnel the reference is to Federal files. Where questions refer to "all" available data or information and such material is voluminous, the response should indicate that files are voluminous, and then reference most telling information, for example groundwater contaminants found frequently or at extremely high concentrations should be specifically listed, and information most directly supporting recommended approach to facility should be described. If no information is available in facility files, the response should so indicate. It is also anticipated that this Appendix may be updated periodically as more information becomes available.

1. Description of All Available Monitoring Data for Facility:

1. DCC		
Type of Data	Date Author	Summary of Results or Conclusions
CANOTION CREEK SAMPLE AT Scie out	9-16-82 OEFA	94 ugle LEAD IN OUTFAIL
SAMPLE AT SCIE GO	TF-A1(
LAgoon Slubge Samples	3-4-85 OEPA	569000 mg/l E.P. LEAD
WASTE Sampling STUDY	10-4-85 BAN	LAGOON Sludge is E.P. Texic FOR LEAD
5.059		

2. Description of Enforcement Status:

Type of Action Date Local, State or Federal Result or Status

NOV. Compliance DRDER

1-31-86

USEPA, Reg. I PROM Respondent Due

3-31-86

3.	Description	of	Any	Complaints	fram	Public:
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Source of Complaint Date Recipient Subject and Response

Dowe

4. Description of All Inspection Reports for Facility:

Date of Inspection Inspector (Local, State, Federal)

6-77-85

EPA

Conclusions or Comments

SUBSTANTIAL LIST OF VIOLATIONS, NO INTERIM STATUS FOR STORAGE FACILITY, NON-NOTIFIER

5. During inspection of this facility did the inspector note any evidence of past disposal practices not currently regulated under RCRA such as piles of waste or rubbish, injection wells, ponds or surface impoundments that might contain waste or active or inactive landfills?

ain was	te or a	
	Yes -	give date if inspection and describe observation
	103	WASTE PIR PLANT DUMP (CONSISTS
		OF PROCESS TEANITARY REFUSE)
		EF ROCESS FIANCIA
		pon't know
	No	

or co	that might be caused by a spill, discharge or disposal of hazardous wanstituents?
	Yes - indicate date of report and describe observations
	No
	Don't know
wi	inspection reports indicate the presence of any tanks at the facility with are located below grade and could possibly leak without being oticed by visual observation?
	Yes - date of inspection and describe information in rep
	No No
	Don't know
l. Doe	s a groundwater monitoring system exist at the facility? 1
). If	answer to question 8 is yes, is the groundwater system capable of mon both regulated RCRA units and other Solid Waste Management Units?
	Explain -
10. I	s the groundwater monitoring system in compliance with applicable RCRA groundwater monitoring standards?
	If no, explain deficiency

11. Decribe all information on facility subsurface geology or hydrogeology available.

Type of Information Author Date Summary of Conclusions

Date

Summary of Conclusions

Author Date

Summary of Conclusions

Author Date

Summary of Conclusions

(Not Conclusions)

12. Did the facility submit a 103(c) notification pursuant to CERCLA?

Yes Date of Notification____

13. If answer to 12 is yes, briefly summarize content of that notification.

(waste management units identified, type of waste concerned)

14. Has a CERCLA Preliminary Assessment/Site Investigation (PA/SI) been completed for this facility?

Yes No

	to question 14 is yes, briefly describe conclusions of the PA/SI
focusing	to question 14 is yes, briefly describe conclusions to types of environmental contamination found, wastes and sources ination, was some. No Conclusions Made Doe To LACK OF DATA
16. If avail Part B,	able, having reviewed the CERCIA notification, RCRA Part A and RCRA it appears that: (CERCIA unit refers to unit or area of concern in CERCIA response activity)
l6. If avail Part B,	CERCIA response activity) RCRA and CERCIA units are same at this facility RCRA and CERCIA units are same at this facility
Part B,	it appears did: (Carronse activity)

18. Identification of Reports or Documentation Concerning Each Release Described in Item 17.

Contents Recipients Author Title/Type of Report Date

19. Highlight any information gaps in the file - describe any plans to obtain additional needed information.

No Closure Plan OR groundwater Monitoring Plan.

20. Summary of major environmental problems noted, desired solution and possible approaches.

Solution UNCLOSED MAZIMASTE POND CLOSURE USEPA ORDER N/A
UNCLOSED MAZIMASTE PILE CLOSURE USEPA ORDER N/A Unclosed Soldwarre Closure State Order or Not Resently
LANDFILLS CLOSURE CORREctive Action issued næber

Information Available Yes : No

Major Data Elements

Major Source (Ohio EPA Divisions, otheragencies, reports/documents)

DEPA DUSTRICT Files Hazardous Conditions Information Owner/Operator Information Floral/Fauna/Food Chain_ Waste Quantity at Site_ Waste Characterization_ Hazardous Substances_ Other Responsible or Affected Parties_ On-Site Inspection Waste Information F1re/Explosion_ Direct Contact **Drinking Water** Surface Water_ Waste States_ Ground Water_ Waste Type_ Operator 0wner 5011 Air